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This evaluation of Cincinnati's Title I projects for the disadvantaged public school students notes that definitive statements about measurable results are unrealistic because the projects were evaluated after only 5 months in operation. However the evaluation establishes baseline data. Information about the 13 Title I projects was gathered from surveys of teachers, students, and parents, and from academic achievement data. Pupil self-image, promotion rates, attendance, and dropouts were studied. The material is presented under the rubrics of (1) rationale, (2) description of the survey, (3) method of analysis, and (4) results. Tables and graphs summarize project data, and an appendix contains samples of the evaluation instruments. (NH)

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EDUCATION ACT PROGRAM EVALUATION

Department of Instruction

CINCINNATI PUBLIC SCHOOLS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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EVALUATION OF THE IMPACT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT IN THE CINCINNATI PUBLIC SCHOOLS

Volume 2, Number 1
October, 1966

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Department of Instruction
Cincinnati Public Schools

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PREFACE

This issue of the Journal has as its purpose the evaluation of the three million dollar Education Act program conducted in the Cincinnati Public Schools in the latter part of the 1965-66 school year. Emerging from this evaluation is clear evidence of success in applying this federal expenditure to the end for which it was intended: improving the educational services offered to children in disadvantaged areas. An examination of the findings reported here will leave little doubt that the constant, diligent effort invested in the program brought results that more than justify the program's continuation.

Indeed, these activities are already underway for the 1966-67 school year. In the day-to-day operation of the program, those involved will benefit from an alertness to the possibilities for improving or refining the services offered. Toward this end the evaluation contained in this journal is directed.

It is apparent, however, that the utility of this type of report is not limited to those directly involved. Attempts to measure the effectiveness of such a new and extensive program have value for a far more diverse population. Educators in other parts of the country undertaking similar programs for the benefit of disadvantaged pupils will surely find this evaluation meaningful. In addition, every employee of the Cincinnati Public Schools--indeed, every citizen of the community--should be aware of these new services and their effects.

Dissemination of information thus takes on considerable importance. The Journal of Instructional Research and Program Development is Cincinnati's printed medium designed to meet this need. Its purposes, spelled out by the Associate Superintendent in Volume I, Number 1, are fourfold:

1. To inform teachers, principals and others of just what has happened or will be happening in instructional research and program development.
2. To serve as a guide to prevailing practices.
3. To stimulate creative and constructive thought on the many instructional problems and issues that demand our attention.
4. To serve as an historical guide in development of instructional content and practice in our schools.

For the most part these purposes cannot be effectively served without the cooperation of school staff members. Teachers should be made aware of the Journal and encouraged not only to read it, but to contribute articles and suggestions. Although Education Act services have been the primary focus of the Journal to date, they will by no means be the sole basis of information to be reported here.

The strategy behind the original design of Education Act projects was to assign responsibility for administration as nearly as possible to those departments and divisions that would care for the same services if they were provided through local school funds. For this reason, the original program was divided into thirteen separate projects. Now that each of these projects has been initiated, it seems appropriate to work for more efficient organization. Thus, for the current school year the thirteen projects have been combined into six. Essentially, though, the services provided will be the same.

The two projects related to development and in-service training of staff have been combined under one heading; another heading puts together the two projects concerning emotional learning and communication problems. The three services related to elementary enrichment and remediation have also been grouped together, and the parent education service has been divided between this project and the secondary level project. Unchanged are the projects on early childhood education and physical health services. It is hoped that it will be possible to carry these six projects through the entire period of September through August rather than design a separate program for summer school services.

The evaluation of the Education Act Program is the responsibility of the Division of Program Development, James N. Jacobs, Director, and Joseph Felix, Associate. The job could not have been completed without the extensive help given by the Division of Evaluation Services, Joan Bollenbacher, Director; the Division of Psychological Services, Charles Miller, Director; and the Division of Data Processing, Edward Ebel, Director. Special recognition must be given to the following persons from these divisions: Albert Rouse, Suzanne Hetzel, Marlene Beigel, Ruth Snyder, Elizabeth Battersby, and Ann Rasche, all from Evaluation Services. Ronald J. Ausdenmoore, John C. Bennett, and James N. Peay, all from Psychological Services, gave valuable assistance particularly in the measurement of self-concept.

Throughout this report the Education Act Program is discussed in terms of its general effects. Specific evaluations of individual projects will be discussed in later issues of this journal.

Robert P. Curry,
Associate Superintendent,
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TABLE OF CONTENTS

PREFACE ii

INTRODUCTION 1

RESULTS OF TEACHER SURVEY 9

RESULTS OF STUDENT SURVEY 23

RESULTS OF PARENT SURVEY 32

PUPIL ACADEMIC ACHIEVEMENT 36

PUPIL SELF-IMAGE 52

PROMOTION RATES 65

PUPIL ATTENDANCE 70

DROP-OUTS 77

CONCLUDING STATEMENTS 85

APPENDIX 88

EVALUATION OF THE IMPACT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT IN THE CINCINNATI PUBLIC SCHOOLS

INTRODUCTION

Background

The passage of the Elementary and Secondary Education Act of 1965 resulted in an allotment of over three million dollars to the Cincinnati Public Schools to enhance the education of disadvantaged children. Thirteen projects were designed to respond to the various needs of disadvantaged children from pre-school through high school. These projects, which were accepted and implemented in fiscal 1966, are described in detail in the Journal of Instructional Research and Program Development, Volume 1, Numbers 3 and 4, 1966, Cincinnati Public Schools.*

Since the projects were all approved in the first five months of 1966, their duration has probably been too brief to expect measurable advantageous results. In the first place, each project had to be superimposed on an existing instructional program, and achieving efficent operation was thus made a more complex task. New staff positions are still undergoing changes in definition of role and of relationship with pupils. Administrative details are being ironed out, and certain overlapping functions are being identified and eliminated. Secondly, those services that had direct impact on individual pupils did so for a very brief time. Some of the objectives that have been identified for projects are so complex in nature that it is realistic to expect changes to occur only after a period of years. Those who look for measurable results during these first few months of operation will be disappointed.

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*Limited copies of the Journal are available upon request from the Division of Program Development, Department of Instruction, Cincinnati Public Schools.

And yet, early and continuous evaluation of the Education Act Program is a necessity. Not only is it required by the law itself, but it is also a matter of great concern to educators. Only through such evaluation can optimal use of available funds be assured. Further, should these funds be reduced, educators must be able to determine which services have been most effective.

Generalizations

In the process of evaluating the Education Act Program for the current year, several gross generalizations may be made:

1. Our school system has benefited greatly from the process of diagnosis that is inherent in evaluation. We are becoming more sensitive and sophisticated in identifying needs and measuring educational outcomes of school children.

2. We are becoming more aware of the need for better instrumentation to measure important educational objectives.

3. The process of disseminating important findings needs to be studied and strengthened.

4. We must attain a flexible posture so that changes can be made when the evidence indicates that such changes are desirable. We must remain sufficiently "experimental" so that no practice becomes immutable.

5. Education Act projects and their component services, evaluation and dissemination procedures, probably are having an impact on the school system as a whole.

6. There is a great need for the development of evaluation strategies. Experimental designs are often inappropriate and impossible to apply to educational projects. Rational validity and internal consistency will have to replace empirical types of validity.

7. There is a need to keep an accurate account of the precise activities that go into making up each project. It is not uncommon for such a "log" to be the only source of (self-evident) validity for an activity or service.

These facts in no way minimize the importance of evaluating systematically. Each of the thirteen projects has a set of predetermined goals, and although many of these are abstract and difficult to measure, all

Erratum

An error in the English scores reported in Table 8, page 44, was detected after the Journal had been printed. These scores, as well as the comment about the scores on page 47 (lines 12-14), should be ignored.

available evidence must be carefully weighed to determine how well these goals have been met. It is not sufficient simply to believe that a service or treatment is effective.

Program vs. Project Evaluation

Ideally, evaluation should be aimed at determining the precise effect of each service and each project. If this could be done, decisions could be made as to which of several alternative procedures for attaining a specific objective should be used. For example, if increased reading achievement is a desirable goal to attain among disadvantaged children, it is apparent that many procedures can be applied to attain this goal. One could presume that early childhood education might be most effective for increasing reading in later grades. One might reduce class size or provide the services of a remedial reading teacher. One could also approach the problem from the point of view that the classroom teacher needs additional specialized training, or that some amount of time is required for a tutorial program. These are only some of the possibilities for increasing reading achievement. It is apparent that out of the array of possible approaches to this problem we need to know which are more effective and under what conditions they are most effective.

Unfortunately, it is extremely difficult to evaluate the services of the various projects in such a manner. Each service attenuates and interacts with every other service thus making it difficult to identify cause and effect relationships. Tight experimental designs are usually needed to attribute cause and effect relationships; yet such decisions are unrealistic in the sense that some number of pupils must be sacrificed as controls. In addition, it is unrealistic to assume that one cause will produce a given effect since in reality there are many factors which affect such complex variables as achievement.

The measurement of complex variables has been subsumed under program evaluation, i.e., the composite effects of all projects and services. Project evaluation involves less complex variables and/or those more amenable to rational or empirical study as to cause and effect.

The distinction between program and project evaluation lies mainly in the degree to which we can attribute criterion measurements to given causes. Often, the distinction is difficult to make. Program evaluation criteria may be viewed as responding to all project services and their interactions, while project evaluation criteria are judged to be responding mainly to the services and conditions of that particular project.

Strategy

The overall strategy for program evaluation has been to identify several complex variables which may be viewed as barometers of educational health. These variables are assessed under nine headings, which indicate the divisions of this report:

1. Teacher Evaluation
2. Student Evaluation
3. Parent Evaluation
4. Pupil Achievement
5. Pupil Self-Image
6. Pupil Promotion
7. Pupil Attendance
8. Pupil Drop-Outs

Criterion measurements of these divisions have been obtained in three classifications of schools: primary target (PT), secondary target (ST), and controls (C). Primary target schools are those which have the highest concentrations of disadvantaged children. Further, they are schools in which all of the thirteen projects operate with the greatest intensity. Secondary target schools are those with lesser concentrations of disadvantaged pupils and in which only certain projects operate. Control schools are those which come closest to the target schools in terms of concentration of disadvantaged children. Control schools stand midway between target and non-target schools. The numbers and types of schools in each classification are as follows:

Primary Target	Secondary Target	Controls
13 public elementary	19 public elementary	3 public elementary
3 non-public elementary	11 non-public elementary	2 public secondary
4 public secondary	4 public secondary	

The general hypothesis which permeates program evaluation is that the criterion measurements will respond to the intensity of treatments. Thus, it is expected that primary target schools should show the most desirable change followed by secondary target schools and control schools. In shorthand form this hypothesis is: PT> ST> C.

Two allied difficulties are encountered in interpreting the data collected. First, the control group consists of only five schools. This limited number, with the resulting danger of an atypical population, aggravates the problem inherent in the classification of schools. Although the control schools were chosen for their similarity to target schools, they cannot be assumed to provide a comparable population. In fact, the classifications themselves indicate different types of pupils.

This dissimilarity produces the second difficulty in data interpretation. In order to take into account initial differences in criterion measurements change scores will have to be used. Since this is the first year of operation for the ESEA Program, much of the data presented will be baseline data from which change can be assessed next year.

It should be noted that 14 non-public schools are included in the target school classifications. Throughout the evaluation primary target data from public and non-public schools are handled together, as are secondary target data.

Finally, it should be emphasized that the ultimate purpose for evaluation is to determine the effects of various services on specific objectives. When criterion measures are obtained from all pupils in all schools, it is apparent that the resulting averages may conceal significant gains that may occur among a smaller group of pupils who received more intensive service both qualitatively and quantitatively. When all pupils within a school receive identical services, this issue is unimportant but such was not the case. The Education Act Program for 1966-67 will focus services to an even greater extent on a relatively small number of seriously disadvantaged pupils. Evaluation procedures which focus on specific pupils who receive special treatment within a school will be applied next year as well as the current procedures that focus on changes within a whole school's population.

Projects and Their Essential Components

The thirteen projects and their basic components which constitute the Title I ESEA Program are:

1. Early Childhood Education (Budget: $223,000)
    a. Medical, dental, and welfare services for follow-up of Operation Head Start, 1965
    b. Pre-Kindergarten classes
    c. Classes for pre-grade one children.

2. Remediation & Maintenance of Physical Health (Budget: $70,000)
    a. Vaccinations
    b. Health exams
    c. Increased nursing and physician service.

3. Saturday Morning Enrichment (Budget:$26,000)
    a. Enrichment of able pupils
    b. Interest oriented curriculum
    c. Field trips

4.* Speech Improvement (Budget: $31,000)
    a. Remediation of sub-standard speech patterns.
    b. In-service teacher training

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* These operate in primary target schools only.

5.* Remediation & Enrichment in Secondary Schools (Budget: $468,000)
  a. Remedial teacher
  b. Services of resourch teacher, administrative aides, parent-monitors, and teacher aides.
  c. Intensified services in counseling, psychological and visiting teacher services, nursing and secretarial help.
  d. Increased equipment and supplies.
  e. Student welfare
  f. Field trips.

6. Program for Emotionally Disturbed & Learning Disabilities (Budget: $96,000)
  a. Clinical diagnostic team services
  b. Special classes for emotionally disturbed
  c. Special classes for socially-maladjusted
  d. In-service training of teachers to teach more (b) and (c) classes.

7.* Remediation & Enrichment in Elementary Schools (Budget: $477,000)
  a. Remedial teaching
  b. Services of resource teachers and administrative aides and teacher aides.
  c. Intensified visiting teacher service
  d. After-school enrichment program
  e. Audio-visual aids and other equipment
  f. Field trips and other sources of cultural enrichment

8. Parent Education (Budget: $77,000)
  a. Parent group discussions
  b. Parent-leadership training
  c. Provision for child care

9. Staff Development (Budget: $73,000)
  a. Lectures by consultants
  b. Leadership training
  c. In-school training sessions

10. In-Service Training (Budget: $20,000)
  a. University training courses for remedial reading teachers and elementary school librarians

11. Secondary Summer School (Budget: $108,000)
  a. Reading improvement
  b. Remedial arithmetic
  c. Art enrichment
  d. Music enrichment
  e. Social studies
  f. Science
  g. Junior theater
  h. Pre-College workshop

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*These operate in primary target schools only.

12. Elementary Summer School (Budget: $417,000)
    - a. Remedial teaching
    - b. Music instruction
    - c. Art instruction
    - d. Physical education
    - e. Teacher-librarian services
    - f. Psychological services
    - g. Teacher-aides
    - h. Field trips
    - i. Visiting teacher service

13. Educational Resource Centers (Budget: $1,055,000)
    - a. Books and other audio-visual materials and equipment
    - b. Teacher-librarian services

This report deals only with program evaluation. Project evaluation reports will be made at a later date and deal with the more specific outcomes of each of the thirteen projects.

RESULTS OF TEACHER SURVEY

Rationale

The impact of ESEA in the schools can best be evaluated on the basis of information about those persons most directly affected. Certainly teachers, fundamentally involved in the learning process, are a key source of information. It seems reasonable to assume that their professional training and experience equip them to make valid evaluative ratings regarding Education Act services and concepts. Regardless of the validity of the teachers' judgements, however, their ratings are important as an expression of their feelings about educational concepts and services.

Description of Survey

Teachers in target and control schools were given a survey in which they were to rate various concepts and services on an evaluative scale. This survey form, administered in January, 1966 and again in June, 1966, is shown in the appendix.

The January survey consisted of 44 items, each representing a concept or service relevant to one or more objectives of the thirteen projects. Teachers were instructed to rate each item from "poor" to "good" on a seven-point scale.

The technique of rating a large number of concepts on a common scale so that comparisons may be made among different concepts is called the semantic differential. This term implies that a concept term has different meanings to different individuals. Differences may result, for example, from thinking in terms of varying reference groups. Nevertheless, it is believed that the average of a large number of ratings has a meaning which transcends individual differences. Therefore, since the identity of the rater is unimportant, the surveys were kept anonymous to insure more valid responses. Certain respondent characteristics, such as sex, school, and years of experience, were indicated.

Method of Analysis

The primary interest in the survey was in the changes that might occur between January and June. For all practical purposes, the Education Act program did not go into effect until late January and then only for two of the thirteen projects (Early Childhood Education and Health). The importance of measuring change is relevant in two ways: the change in the average rating of all survey items; and the particular changes in each survey item.

Through the analysis of variance technique mean differences in January and June ratings were compared among the three types of schools, both for the survey as a whole and for six rational categories of items. In addition, the significance of differences among various survey items was tested.*

Results

Elementary Level Teachers. Table 1 presents the mean ratings for each school classification. Since 1 is the lowest possible rating and 7 is the highest, a rating of 4 is considered a neutral evaluation.

Of greatest significance is a comparison of the average differences in ratings from January to June among school classifications. The mean rating difference in primary target schools was +.12 while the mean rating difference in secondary target schools was -.20 and in control schools -.24. An analysis of variance of the January-June differences showed a significant difference in the overall mean ratings, favoring PT teachers over both ST and C teachers. The difference between the mean ratings of ST and C teachers was not significant.

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*Differences between particular means were tested by using an average error of variance for all items and all classes of schools and considering differences in sample size.

These results support the general hypothesis that criterion measurements would be highest for primary target schools. They do not confirm the hypothesis that the secondary target schools would be higher than the control schools. One possible explanation is that the number of projects and the types of services in the secondary target schools may not have been sufficiently great to show a significant difference.

The absolute differences in ratings from January to June should be interpreted cautiously. It is quite possible that teacher ratings vary systematically depending on the time of year in which the ratings are made. The fact that ratings in the control schools decreased an average of .24 would suggest the possibility, at least, that mid-year evaluative ratings are higher than end-of-year ratings even though no identifiable changes have occurred in the school.

Rough estimates of the significance of change from January to June for each item were made. An average error of variance of 3.27 was used to estimate the significance of difference. Using this error term the minimum rating difference needed for significance, i.e., not due to chance, for teachers in primary target schools (N=373) is .33. Similarly, the minimum difference in secondary target schools (N=501) is .29 and for control schools (N=55)is .93. Items showing a statistically significant change for January to June are asterisked in Table 1.

Table 2. Mean Ratings of Survey Items Made by Elementary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools.

SURVEY ITEMS		PRIMARY TARGET SCHS.			SECONDARY TARGET SCHS.			CONTROL SCHS.		
		Jan. N=373 (1)	June N=337 (2)	Diff. (2)-(1) (3)	Jan. N=501 (4)	June N=495 (5)	Diff. (5)-(4) (6)	Jan. N=55 (7)	June N=65 (8)	Diff. (8)-(7) (9)
1.	Adequacy of supplies.	5.05	5.33	+.28	4.77	4.81	+.04	5.69	5.63	-.06
2.	Parent involvement.	2.94	3.23	+.29	3.11	2.83	-.28	3.47	3.17	-.30
3.	Motivation of my pupils.	4.47	4.45	-.02	4.38	4.06	-.32*	4.74	4.66	-.08
4.	Adequacy of school building.	4.26	4.26	0	4.13	4.02	-.11	3.73	3.41	-.32
5.	Size of my class(es).	4.56	4.23	-.33*	4.15	3.73	-.42*	3.53	3.73	+.20
6.	Pupil-faculty relations.	5.08	4.90	-.18	5.19	4.76	-.43*	5.45	5.20	-.25
7.	Books available to my class.	4.81	5.01	+.20	4.75	4.61	-.14	5.02	4.92	-.10
8.	Adequacy of school library.	3.42	3.85	+.43*	3.24	3.23	-.01	4.38	3.72	-.66
9.	Provision for academic remediation.	3.81	4.40	+.59*	3.92	3.86	-.06	4.04	3.95	-.09
10.	Availability of professional reading mat.	4.43	4.80	+.37*	4.30	4.34	+.04	4.54	4.20	-.34
11.	Degree of tardiness.	4.19	4.03	-.16	4.26	4.07	-.19	4.69	4.28	-.41
12.	School's provision for pupil's health.	4.60	4.96	+.36*	4.99	4.91	-.08	4.98	4.61	-.37
13.	Time and place for pupils to study.	3.57	3.54	-.03	3.42	3.19	-.23	4.44	3.75	-.69
14.	Overall health level of pupils.	3.82	3.99	+.17	4.15	4.03	-.12	4.62	4.23	-.39
15.	Pupil aspiration level.	3.27	3.50	+.23	3.17	3.12	-.05	3.80	3.65	-.15
16.	School attendance of pupils.	4.22	4.38	+.16	4.31	4.19	-.12	4.33	4.26	-.07
17.	Parent participation in school.	2.74	2.93	+.19	2.84	2.54	-.30*	3.45	3.02	-.43
18.	Teacher time to plan.	3.59	3.30	-.29	3.56	2.96	-.60*	3.25	2.97	-.28
19.	Teaching in my school.	5.57	5.42	-.15	5.71	5.46	-.25	6.11	5.88	-.23
20.	Teacher-Administration cooperation.	5.55	5.32	-.23	5.63	5.30	-.33*	5.51	5.35	-.16
21.	Supportive attitude of parents.	3.70	3.71	+.01	3.60	3.28	-.32*	4.17	3.84	-.33
22.	Behavior standards of my pupils.	4.17	4.05	-.12	4.01	3.69	-.32*	4.44	3.98	-.46
23.	Pupil discipline.	3.97	3.89	-.08	4.09	3.68	-.41*	4.09	3.85	-.24
24.	Adequacy of school playground.	3.45	3.51	+.06	3.58	3.38	-.20	3.07	3.09	+.02
25.	Provision to challenge able learner.	4.15	4.25	+.10	4.18	3.98	-.20	5.00	5.38	+.38

*This difference is statistically significant.

(Continued)

Table 1. Mean Ratings of Survey Items Made by Elementary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools. (Continued)

SURVEY ITEMS	PRIMARY TARGET SCHS. Jan. N=373 (1)	June N=337 (2)	Diff. (2)-(1) (3)	SECONDARY TARGET SCHS. Jan. N=501 (4)	June N=495 (5)	Diff. (5)-(4) (6)	CONTROL SCHS. Jan. N=55 (7)	June N=65 (8)	Diff. (8)-(7) (9)
26. Provision for pupil's cultural growth.	3.85	4.52	+.67*	3.59	3.51	-.08	4.56	4.30	-.26
27. Provision for visiting teacher service.	4.68	4.72	+.04	5.08	4.88	-.20	4.91	4.73	-.18
28. Achievement of pupils.	3.81	4.00	+.19	3.68	3.72	+.04	4.13	4.12	-.01
29. Provision for supervisory personnel.	5.15	5.01	-.14	5.23	4.97	-.26	5.85	5.40	-.45
30. Pupil acquaintance with total community.	3.67	3.87	+.20	3.56	3.60	+.04	4.07	4.02	-.05
31. Adequacy of enrichment activities.	4.18	4.93	+.75*	4.21	4.04	-.18	5.15	5.17	+.02
32. Present curriculum for the disadvantaged.	3.76	4.23	+.47*	3.63	3.48	-.15	3.91	3.38	-.53
33. The type of pupils I teach.	3.28	3.57	+.29	3.24	3.20	-.04	3.82	3.77	-.05
34. Provision for phys.-handicapped child.	2.99	3.29	+.30	3.03	2.81	-.22	2.58	2.25	-.33
35. Staff morale.	5.12	4.88	-.24	5.29	4.81	-.48*	5.51	4.97	-.54
36. Provision for emotionally-disturbed.	2.49	2.51	+.02	2.43	2.53	+.10	2.26	1.81	-.45
37. Time to teach.	4.87	4.65	-.22	4.80	4.39	-.41*	5.36	4.89	-.47
38. Provision for soc-maladjusted child.	2.41	2.51	+.10	2.50	2.47	-.03	2.69	2.12	-.57
39. In-service training.	5.17	4.89	-.28	5.30	4.75	-.55*	5.69	5.52	-.17
40. Previous academic preparation of pupils.	3.33	3.56	+.23	3.69	3.52	-.17	4.17	4.25	+.08
41. Pupil image of self.	3.56	3.43	-.13	3.59	3.26	-.33*	4.47	4.02	-.45
42. Prof. cooperation among school staff.	5.43	5.24	-.19	5.72	5.38	-.34*	5.89	5.73	-.16
43. Field trip opportunities.	4.47	5.82	+1.35*	4.19	4.08	-.11	4.55	4.83	+.28
44. School's attempt to reach parents.	5.29	5.36	+.07	5.62	5.38	-.24	5.62	5.09	-.53
GRAND MEAN	4.11	4.23	+.12	4.13	3.93	-.20	4.45	4.21	-.24

*This difference is statistically significant.

NOTE: Four items were added to the June survey: Intelligibility of pupil speech ($\overline{X}$=3.27), Provision for pupil welfare needs ($\overline{X}$=4.84), Help in handling disciplinary problems ($\overline{X}$=4.87), and Adequacy of instructional media ($\overline{X}$=4.85). Because comparative January data is unavailable, these items are omitted from Tables 1 and 3.

To simplify the data shown in Table 1, survey items were grouped into six arbitrarily defined categories as follows:

Staff Morale

Teaching in my school
Teacher-Adm. cooperation
Staff morale
Professional cooperation
Pupil-faculty relations

Special Prov. for Sub-Groups

Academic remediation
Pupil health
Challenge able learner
Cultural growth
Enrichment activities
Curriculum for disadvantaged
Physically-handicapped
Emotionally-disturbed
Socially-maladjusted
Field trip opportunities
Help in disciplinary problems
Prov. for pupil welfare needs

Parent Involvement

Parent involvement
Parent participation
Supportive attitude of parents

Teacher Status

Availability of prof. reading matter
Teacher time to plan
Time to teach
In-service training

School Characteristics

Supplies
Adequacy of school building
Size of my class(es)
Books available
Adequacy of school playground
Time and place to study
Adequacy of school library
School's attempt to reach parents
Visiting teacher service
Supervisory personnel
Type of pupils I teach
Adequacy of instructional materials

Pupil Characteristics

Motivation
Tardiness
Health of pupils
Aspiration
Attendance
Behavior standards
Discipline
Achievement
Acquaintance with community
Academic preparation
Self-image
Intelligibility of speech

The mean differences between January and June shown in Table 1 were grouped and averaged for each category. These results for elementary teachers are shown in Table 2.

Table 2. Mean Rating Differences from January to June of Elementary Teacher Survey Items Classified into Six Rational Categories by Type of School.

Teacher Survey Item Categories	Primary Target	Secondary Target	Controls
Staff Morale	-.20	-.37	-.27
School Characteristics	+.79	-.17	-.26
Pupil Characteristics	+.61	-.18	-.20
Special Provisions	+.47	-.10	-.19
Parent Involvement	+.16	-.30	-.35
Teacher Status	-.11	-.38	-.32

Each of the six categories reflects to some degree the general finding that primary target elementary school teachers rated survey items highest, while secondary target and control school teachers rated items about the same. Some important differences, however, are seen in Table 2. Items dealing with Staff Morale were rated lower in June than in January and about equally so, by the staff in all three types of schools. Staff Morale ratings were high initially and continued high, so this result may be a regression effect. Items dealing with Teacher Status followed a pattern similar to that of Staff Morale, although the differences between primary target and each of the other types of schools are largest for Teacher Status. In each category the mean differences between secondary target and control are approximately the same, thus conforming to the general finding from Table 1 that PT > ST = C. Perhaps the most significant finding in Table 2 is the fact that the ratings in the primary target schools for School Characteristics (+.79), Pupil Characteristics (+.61), and Special Provisions for Pupil Sub-Groups (+.47) increased significantly. Parent Involvement increased somewhat (+.16) but not as much as the other three categories.

These findings indicate that the categories in which the bulk of services given by the Education Act are the same categories which showed

Table 3. Mean Ratings of Survey Items Made by Secondary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools.

SURVEY ITEMS	PRIMARY TARGET SCHS.			SECONDARY TARGET SCHS.			CONTROL SCHS.		
	Jan. N=195 (1)	June N=215 (2)	Diff. (2)-(1) (3)	Jan. N=223 (4)	June N=198 (5)	Diff. (5)-(4) (6)	Jan. N=39 (7)	June N=63 (8)	Diff. (8)-(7) (9)
1. Adequacy of supplies.	4.82	5.13	+.31	4.92	4.82	-.10	5.46	4.76	-.70
2. Parent involvement.	2.17	2.51	+.34	2.44	2.76	+.32	3.49	2.68	-.81
3. Motivation of my pupils.	3.68	3.85	+.17	3.60	3.21	-.39	4.03	3.13	-.90
4. Adequacy of school building.	4.83	4.48	-.35	4.45	4.51	-.06	5.51	4.43	-1.08*
5. Size of my classes.	4.16	4.34	+.18	3.93	3.76	-.17	3.49	3.55	+.06
6. Pupil-faculty relations.	4.90	4.99	-.09	4.56	4.41	-.15	4.77	4.05	-.72
7. Books available to my class.	4.77	4.74	-.03	4.85	4.39	-.46*	5.08	4.61	-.47
8. Adequacy of school library.	5.44	4.98	-.46*	5.67	5.53	-.14	5.54	4.51	-1.03*
9. Provision for academic remediation.	3.85	4.23	+.58	4.10	3.58	-.52*	4.34	3.47	-.87
10. Availability of professional read. matt.	4.89	4.97	+.08	5.14	5.16	+.02	5.03	4.54	-.49
11. Degree of tardiness.	2.73	2.96	+.23	3.34	3.21	-.13	4.69	3.32	-1.37*
12. School's provision for pupil's health.	4.96	5.61	+.65*	5.13	4.74	-.39	4.82	4.52	-.30
13. Time and place for pupils to study.	3.80	3.80	0	3.48	3.44	-.04	5.03	3.79	-1.24*
14. Overall health level of pupils.	3.71	4.00	+.29	4.10	3.93	-.17	5.03	4.10	-.93*
15. Pupil aspiration level.	2.88	3.15	+.27	3.01	2.83	-.18	3.46	2.52	-.94*
16. School attendance of pupils.	2.78	3.15	+.37	3.66	3.57	-.09	4.67	3.35	-1.32*
17. Parent participation in school.	1.97	2.00	+.03	2.17	2.20	+.03	3.31	2.14	-1.17*
18. Teacher time to plan.	4.06	4.03	-.03	4.16	3.73	-.43	3.87	3.62	-.25
19. Teaching in my school.	5.34	5.32	-.02	5.40	5.20	-.20	5.82	4.98	-.84
20. Teacher-Administration cooperation.	5.87	5.55	-.32	5.43	5.25	-.18	6.00	5.33	-.67
21. Supportive attitude of parents.	2.95	2.95	0	3.19	3.13	-.06	3.51	2.62	-.89
22. Behavior standards of my pupils.	3.66	3.83	+.17	3.64	3.45	-.19	3.59	2.97	-.62
23. Pupil discipline.	3.82	4.01	+.19	3.29	3.30	+.01	3.56	2.68	-.88
24. Adequacy of school playground.	3.56	3.72	+.16	3.56	3.69	+.13	4.92	4.40	-.52
25. Provision to challenge able learner.	4.14	4.39	+.25	4.30	4.08	-.22	5.36	3.97	-1.39*

*This rating difference is statistically significant.

(Continued)

Table 3. Mean Ratings of Survey Items Made by Secondary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools.. (Continued)

SURVEY ITEMS	PRIMARY TARGET SCHS. Jan. N=195 (1)	June N=215 (2)	Diff. (2)-(1) (3)	SECONDARY TARGET SCHS. Jan. N=223 (4)	June N=198 (5)	Diff. (5)-(4) (6)	CONTROL SCHS. Jan. N=39 (7)	June N=63 (8)	Diff. (8)-(7) (9)
26. Provision for pupil's cultural growth.	3.71	4.29	+.58*	3.66	3.64	-.02	4.59	3.83	-.76
27. Provision for visiting teacher service.	4.25	4.59	+.34	4.70	4.41	-.31	4.23	3.92	-.31
28. Achievement of pupils.	3.29	3.67	+.38	3.39	3.36	-.03	3.85	3.44	-.41
29. Provision for supervisory personnel.	4.94	5.19	+.25	5.06	4.60	-.46	5.00	4.60	-.40
30. Pupil acquaintance with total community.	3.41	3.76	+.35	3.52	3.33	-.19	3.59	3.22	-.37
31. Adequacy of enrichment activities.	4.01	4.72	+.71*	4.06	3.76	-.30	4.92	3.92	-1.00*
32. Present curriculum for the disadvantaged.	3.69	4.44	+.75*	3.59	3.30	-.29	5.00	3.89	-1.11*
33. The type of pupils I teach.	3.35	3.49	+.14	3.34	3.23	-.11	3.82	2.98	-.84
34. Provision for phys.-handicapped child.	2.85	3.35	+.50*	3.19	2.93	-.26	3.46	2.93	-.53
35. Staff morale.	5.31	5.12	-.19	5.33	4.99	-.34	5.69	4.23	-1.46*
36. Provision for emotionally-disturbed child.	2.44	3.08	+.64*	2.36	2.38	-.08	2.90	2.63	-.27
37. Time to teach.	4.85	4.70	-.15	4.88	4.55	-.33	4.87	4.44	-.43
38. Provision for soc.-maladjusted child.	2.46	3.17	+.71*	2.32	2.26	-.06	2.97	2.66	-.31
39. In-service training.	4.82	4.72	-.10	4.87	4.72	-.15	4.79	4.45	-.34
40. Previous academic training of pupils.	3.09	3.13	+.04	3.25	3.06	-.19	3.46	3.22	-.24
41. Pupil image of self.	3.03	3.21	+.18	3.05	2.83	-.22	4.08	3.40	-.68
42. Prof. cooperation among school staff.	5.38	5.42	+.04	5.65	5.32	-.33	6.18	5.52	-.66
43. Field trip opportunities.	4.92	5.88	+.96*	4.14	4.25	+.11	5.03	4.52	-.51
44. School's attempt to reach parents.	5.31	5.20	-.11	5.23	5.12	-.11	5.74	4.89	-.89
GRAND MEANS	3.97	4.18	+.213	4.03	3.96	-.169	4.51	3.79	-.724

significant improvement--at least in the primary target elementary schools. The Staff Morale and Teacher Status categories, which had only an indirect relationship to Education Act project objectives, showed no significant increase. The reader should be reminded that the decreases in ratings from January to June should not be interpreted as necessarily connected with the Education Act. Since control schools rated lower in June than in January, it is a highly tenable hypothesis that such decreases result from unknown factors relating to time of year.

Secondary Level Teachers. Table 3 presents the mean ratings of secondary school teachers in January and June by item. The overall mean rating difference from January to June in primary target schools is seen to be +.21; in secondary target schools, -.17; and in control schools, -.72. An analysis of variance of these differences revealed them to be statistically significant; thus primary target, secondary school teachers gave higher ratings than secondary target school teachers who in turn gave higher ratings than control school teachers. This finding parallels precisely the general hypothesis that PT > ST > C.

Table 4 summarizes the results of Table 3 in a manner similar to that used for elementary school teachers.

Table 4. Mean Rating Differences from January to June of Secondary Teacher Survey Items Classified into Six Rational Categories by Type of School.

Teacher Survey Item Categories	Primary Target	Secondary Target	Controls
Staff Morale	-.08	-.24	-.87
School Characteristics	+.06	-.17	-.68
Pupil Characteristics	+.24	-.16	-.79
Special Provisions	+.53	-.20	-.72
Parent Involvment	+.12	+.10	-.96
Teacher Status	-.05	-.22	-.38

Each category seems to show the same pattern of PT> ST> C (as far as positive change is concerned) with the exception of parent involvement where PT = ST> C. If one assumes that ratings of the parent involvement category are responding to the parent education project, the latter finding is explainable since this project operated in a similar fashion in both primary and secondary target schools.

It is of interest to note that the decreases in ratings in the two secondary control schools were much larger than those in the four elementary control schools. The reason for this is unclear. It may simply be a function of the selection of control school; it may be a general phenomenon which distinguishes elementary from secondary schools; or perhaps it is a reaction of the secondary control school staffs of being denied the services of the target schools.

The largest increase in rating by secondary staff was the .53 increase in special provisions for pupil sub-groups and .24 increase for pupil characteristics both in the primary target schools.

Summary and Conclusions

The teaching staff in primary target, secondary target, and control schools at both elementary and secondary levels were administered a survey in which they were to evaluate various concepts and services relating to one or more Education Act projects. The survey was administered in January and again in June, thus corresponding roughly to the beginning and end of the Education Act program for fiscal 1966. Primary target schools are those which received the great majority of services under the Education Act by virtue of their very high concentration of disadvantaged pupils. Secondary target schools received only some project services since these schools contained smaller proportions of disadvantaged pupils. Control schools, which are those which would be qualified next if more resources were made available, received no services under the Education Act.

The survey is predicated on the assumption that the teaching staff can make valid evaluative ratings regarding the services and concepts involved in the Education Act. Assuming such validity, the general hypothesis that was tested was that rating *differences*, i.e., change, from January to June would favor the primary target schools and be followed in order by secondary target schools and control schools (PT> ST>C). This hypothesis was explored for elementary level and secondary level staff separately.

The conclusions are:

Elementary Level Teachers

1. Mean rating difference of all items by elementary teachers showed a significant *increase* from January to June in primary target schools. Mean ratings in secondary target schools and control schools *decreased*, each by a similar amount. Thus, the general hypothesis was partially substantiated.
2. Survey items showing *significantly higher ratings* from January to June in primary target elementary schools are:

   Adequacy of school library

   Provision for academic remediation

   Availability of professional reading matter

   School's provision for pupil health

   Adequacy of enrichment activities

   Present curriculum for the disadvantaged

   Field trip opportunities

   Only one item, *Size of my class(es)*, showed a significant decrease.

3. No survey items showed a significant increase in secondary target or control schools but many showed a significant decrease.

4. In general, the survey items dealing with staff morale were about the same among PT, ST, and C schools, though all systematically decreased. Items dealing with school characteristics, pupil characteristics, and special provisions for pupil sub-groups increased significantly in PT schools and decreased about the same in ST and C. Teacher status items decreased somewhat in PT schools, but decreased much more in ST and C schools. Parent involvement items increased a small amount in PT schools and decreased about the same in ST and C schools.

5. In general, the elementary school teacher ratings reveal that the Education Act program is benefiting pupils in primary target schools but does not support the hypothesis that these benefits apply to pupils in secondary target schools. This is an expected result.

Secondary Level Teachers

6. Mean rating differences of all items by secondary level teachers showed a significant increase from January to June in primary target schools. Rating in ST schools decreased, and C school ratings decreased even more. This order of schools confirms the general hypothesis.

7. Survey items showing significantly higher ratings from January to June in primary target secondary schools are:

   School's provision for pupil health
   Provision for pupils' cultural growth
   Adequacy of enrichment activities
   Present curriculum for the disadvantaged

Provision for physically-handicapped

Provision for emotionally disturbed

Provision for socially maladjusted

Field trip opportunities

One item, Adequacy of school library, showed a significant decrease.

8. No survey item showed a significant increase in ST or C schools but many showed a significant decrease.

9. There was the least amount of relative increase in items dealing with staff morale and teacher status in primary target schools. The largest increases were in special provisions for pupil sub-groups followed by increases in pupil characteristics, parent involvement, and school characteristics. In each category of survey items the trend was: PT > ST > C.

General Conclusions

10. There appears to be a general phenomenon of lower ratings being given at the end of the school year in comparison with the middle of the school year. It is not believed that this phenomenon is related to the Education Act program since this tendency holds for control schools which had nothing to do with the Education Act. Teachers at the secondary level seemed to lower their ratings more from January to June than teachers at the elementary level.

11. The over-all picture shows that those schools which receive most services also respond most favorably in terms of their survey evaluative ratings. Conversely, schools receiving least or no services respond least favorably. The impact of the program in ST schools, as far as teacher ratings are concerned, is small, particularly for elementary schools.

RESULTS OF STUDENT SURVEY

Rationale

The views of students relative to the impact of the Education Act program are important. Rather than students rating projects, however, the approach has been to measure their feelings about school, concerns about school improvement, expressions of parent interest, their self-image and aspiration and a sampling of their behaviors relative to specific project objectives. It is believed that less bias results from this approach (which aims at measuring complex goals) than from ratings of specific activities.

Description of Survey

All students in grades four through eleven in target and control schools completed a 20 item questionnaire anonymously. They were asked, however, to indicate the name of the school, their grade level, and sex. (See appendix for survey form.)

The classroom teacher read directions to the students, who were instructed to answer each item "yes" or "no." As with the teacher and parent survey, pupils in non-public schools were included in the survey. The survey was not administered below grade four simply because most pupils would not have been able to read the questionnaire. Other instruments were developed and administered to primary grade pupils and will be discussed later in this report. Students in 53 schools responded to the survey--a total of 18,394 students, 10,207 in grades four through six and 8,187 in grades seven through eleven.

Since no previous survey of this type has been administered, it is not possible to compare these results with those of similar data collected earlier. It is possible, however, to test the general hypothesis ($PT > ST > C$)

and to test possible response differences between elementary and secondary level pupils.

Methods of Analysis

Student surveys were constructed such that they could be scored by machine. The per cents of affirmative responses were computed by grade level as well as by type of school attended, i.e., PT, ST, or C schools. Chi square analyses were made to test the general hypothesis within both elementary and secondary schools and also to determine whether elementary level pupils differed in comparison with secondary pupils. The results of these analyses are shown in Table 5 in the last three columns.

Results

Table 5 shows the per cent of affirmative responses of pupils classified by level and type of school. The item numbers refer to their order on the questionnaire. For convenience, these items have been grouped in the table around five broad areas mentioned previously.

Pupil Valence Toward School. To change the hearts of pupils toward education is as important an objective of the Education Act as is the changing of mind. This set of items attempted to measure the general feeling of pupils toward school.

When asked "Do you like school?", 80 per cent of all pupils indicated *yes*. Elementary level pupils "like school" to a greater extent than secondary level pupils although it was noted that 10th and 11th grade pupils responded more affirmatively than those in the 7th, 8th and 9th. This may be the result of dissatisfied pupils dropping out of school leaving the more successful pupil to enter grades ten and eleven. At the elementary level, it was found that PT=ST=C but for secondary level pupils, PT>ST>C, thus confirming the general hypothesis.

Table 5. Percents* of Affirmative Responses to Student Questionnaire by Type of School and Grade Level, May, 1966.

ITEM	ELEMENTARY SCHOOLS			SECONDARY SCHOOLS			Total All Students	Chi Square Test**by Level	Type of School	
N=	PT (3307)	ST (6086)	C (814)	PT (2861)	ST (4175)	C (1151)	(18,394)		Elem.	Sec.
Pupil Valence Toward School										
1. Do you like school?	85%	83%	85%	79%	75%	65%	80%	El>Sec	NSD	P>S>C
3. Would you like to talk to your teacher more?	72	72	69	54	56	47	64	El>Sec	NSD	P=S>C
8. Would you like to spend more time at school?	53	45	39	21	20	11	35	El>Sec	P>S>C	P=S>C
12. Do you like your school?	80	78	82	74	67	64	75	El>Sec	NSD	P>S>C
13. Do you look forward to coming to school?	82	80	72	65	60	43	71	El>Sec	P=S>C	P>S>C
Concerns Relative to School Improvement										
2. Do you need more help from your teacher?	69	67	60	60	62	55	64	El>Sec	P=S>C	P=S>C
9. Are you satisfied with report card grades?	49	50	51	31	33	34	42	El>Sec	NSD	NSD
10. Do you worry about your schoolwork?	78	78	72	75	78	71	77	NSD	NSD	P=S>C
Parent Involvement in Pupil and Pupil's Education										
14. Do you talk about school at home?	79	82	83	75	75	72	78	El>Sec	NSD	NSD
15. Has someone from home ever talked to teacher?	81	79	79	61	65	61	72	El>Sec	NSD	NSD
16. Do you get praise at home for good schoolwork?	82	80	84	67	67	61	74	El>Sec	NSD	NSD
19. Do you talk about future career at home?	86	85	82	85	84	80	85	NSD	NSD	NSD
Self-Image and Aspiration										
11. Are you doing better in your schoolwork this yr?	75	72	72	56	58	57	66	El>Sec	NSD	NSD
17. Do you think you will graduate from high school?	87	86	88	94	93	91	89	Sec>El	NSD	NSD
18. Do you hope to go to college?	90	88	87	71	76	67	82	El>Sec	NSD	S=P>C
Specific Activities which are Project Objectives										
4. Do you read books from a library?	84	84	87	66	68	70	77	El>Sec	NSD	NSD
5. Do you enjoy field trips?	98	95	95	96	93	93	95	NSD	NSD	NSD
6. Do field trips help you in schoolwork?	77	73	73	77	72	70	74	NSD	NSD	P>S=C
7. Do you have a hobby?	76	78	78	75	78	76	77	NSD	NSD	NSD
20. Do you read more than is required by schoolwork?	61	60	55	45	41	43	52	El>Sec	NSD	NSD

*All percents rounded to nearest whole number.
**Chi square test based on number of affirmative responses.

KEY:
El. - Elementary grades 4-6
Sec. - Secondary grades 7-11
PT - Primary target schools
ST - Secondary target schools
C - Control Schools
NSD - No significant difference

The majority of pupils (64%) felt they would like to talk more with their teachers. This tendency was noted to a greater extent among elementary level than secondary level pupils. In elementary grades PT=ST=C, while in the secondary grades PT=ST>C.

The item "Would you like to spend more time at school?" was answered affirmatively by fewer pupils than any other item on the questionnaire. Elementary pupils were significantly more affirmative to this question than were secondary pupils. At the elementary level PT>ST>C, while for secondary pupils PT=ST>C. It is interesting to note that, while the large majority of pupils like school, they do not wish to spend more time in school.

"Do you like your school?" was responded to in the same manner as "Do you like school?" Elementary pupils like their school more than secondary pupils but within secondary level schools PT>ST>C. The item "Do you look forward to coming to school each morning?" showed precisely the same pattern as the "like school" and "like your school" items.

In general, it would appear that pupils have a rather high valence toward school, even though they do not wish to spend more time at school. There is a definite trend for elementary pupils to have more positive feelings toward school than secondary level pupils. The general hypothesis was confirmed at the secondary level and to a lesser extent at the elementary level.

Concerns Relative to Improvement in School. Pupils who are concerned about doing better in school are presumed to be more highly motivated than those who do not care or are content with their present output.

The item, "Do you need more help from your teacher?" was given an affirmative answer by about two out of three pupils at both the elementary and secondary level. There was a significant difference, however, in response by type of school. For both elementary and secondary pupils, PT=ST>C was indicated.

Only 42 per cent of all pupils indicated they were satisfied with their report card marks. Except for 35 per cent who wanted to spend more time in school, this item showed the least affirmative response. It is quite apparent that elementary pupils are relatively more satisfied with their marks than secondary pupils, but within school level there was no significant difference among pupils in PT, ST, or C schools.

When asked, "Do you worry about your schoolwork?" 77 per cent of all pupils answered yes. Elementary and secondary school children answered yes in about the same proportion. At the elementary level, PT=ST=C, while at the secondary level, PT=ST>C.

In general, it appears that children sampled are concerned about their schoolwork, and that one may infer a motivation to do better. There is some indication that this concern is more prevalent in target than control schools.

Parent Involvement in Pupil and Pupil's Education. Responses to this set of four items would indicate a rather high degree of parent involvement in their children's education. None of these four items showed any differences between PT, ST or C schools, while three items (14, 15, 16) showed higher responses by elementary pupils than by secondary pupils. Thus, it would appear that parents of elementary children talk more about school at home, talk more to their child's teacher, and give more praise at home for good schoolwork than do older pupils in secondary grades.

It is difficult to explain why there was no level difference in responses to the question regarding talking with parents about their future job or career. One would expect this topic to be less frequent among younger pupils than among older pupils; yet the results showed a consistently high per cent of all pupils (85%) talking with their parents about their future job. This finding may have implications for curriculum orientation. Perhaps the curriculum should be more job or career oriented at least to the extent of showing the connection between schoolwork and the job future of the pupil.

Self-Image and Aspiration. As a total group, two out of three pupils felt that they are doing better in their schoolwork, although, as has been consistently noted, elementary level pupils are more affirmative in their responses than secondary level pupils. It was believed that this item would show differences among types of schools, but the facts do not bear this out. For both elementary and secondary level pupils PT=ST=C.

When asked, "Do you think you will graduate from high school?" 89 per cent of all pupils answered yes, but there were significantly more secondary pupils answering affirmatively than elementary pupils. This latter trend is reversed when pupils were asked "Do you hope to go to college?" For this item it was found that more elementary pupils hope to go to college than secondary pupils. It is seen that approximately the same proportion of elementary pupils think they will graduate from high school and hope to go to college. The large majority (over 90%) of secondary school pupils, however, think they will graduate from high school, while only about 75% hope to go to college. Apparently, the aspiration level of pupils does decrease as they get older. It is difficult to explain why ST > PT > C for secondary level pupils in terms of hoping to go to college. It is the only item in which ST > PT.

Project Objectives. The establishment of elementary school libraries, provision for field trips, and provision for hobby interests are objectives of certain projects outlined in the introduction. This set of five items sought to determine whether target school pupils were reading more, obtaining satisfaction and learning from field trips, and developing hobbies.

It was found that 77 per cent of all sampled pupils read books from the library, but elementary grade pupils do so to a greater extent (about 85%) than secondary grade pupils (about 68%). Only 52 per cent of all pupils read more than is required by their schoolwork, and again elementary pupils do so more than secondary pupils. Within elementary and secondary levels, there were no significant response differences in these two items among PT, ST and C schools.

The data show that 95 per cent of all pupils enjoy field trips and 74 per cent believe that field trips help in their schoolwork, regardless of grade level. At the secondary level, PT > ST=C concerning whether field trips help in schoolwork, but no significant difference was observed for this item at the elementary level, although PT schools have done much to arrange meaningful trips and help the classroom teacher to relate such experiences to the instructional program.

About three out of four pupils at both elementary and secondary level indicated they had hobbies. No significant difference was noted among PT, ST and C in spite of the fact that the after-school program in target schools does attempt to encourage hobbies.

Summary and Conclusions

A student questionnaire of 20 items was administered to all pupils in grades four through eleven in target and control schools. Students responded anonymously to the questionnaire, to which they gave yes or no answers. The instrument attempted to measure student attitudes and feelings toward school, concerns about school improvement, expression of parent interest, student self-image and aspiration, and a sample of their behaviors relative to specific project objectives. A total of 18,394 public and non-public school students completed the survey.

The results were analyzed to test the general hypothesis and to determine any differences between the responses of elementary level and secondary level students.

General conclusions are as follows:

1. Of the 40 chi square tests of the general hypothesis, 20 at the elementary and 20 at the secondary level, 12 were significant. The general finding was confirmation of the hypothesis at least to the extent that PT and ST > C. From this it is inferred that the program has met many of its broad objectives as measured by student responses.

2. Students in general have a high positive valence toward school, although they do not wish to spend more time in school. Elementary pupils like school more than secondary pupils, although the general hypothesis was more confirmed at the secondary than the elementary level.

3. Pupils in general but especially elementary pupils, appear to be concerned about their schoolwork. This concern seems to be more prevalent in target than control schools.

4. Students indicate a high degree of parent involvement in their education but more so for elementary than secondary pupils. No significant difference among PT, ST, or C schools was noted in terms of parent involvement.

5. Aspiration level, as reflected by the hope to graduate from high school (89%) and to go on to college (82%) is high. There is evidence that college aspiration does lower from elementary to secondary level, but aspiration for high school graduation increases from elementary to secondary level. Most pupils believe they are doing better in their schoolwork, but elementary pupils believe so more than secondary pupils.

6. Good reading habits were more prevalent among elementary than secondary pupils, but no significant differences were noted among PT, ST, and C. Pupils indicate they enjoy field trips (95%) and that the trips help in their schoolwork (74%).

PT pupils at the secondary level seemed to be helped most in the schoolwork by field trips.

About 3 out of 4 pupils indicated they have hobbies, but no significant difference was noted among PT, ST, or C.

7. Finally, it is of importance to note the discrepancies between student and teacher responses to similar areas. Teachers view parent interest and involvement low, while pupils rate it high.

Similarly, teachers rate pupil aspiration, concern over schoolwork (motivation), and general student attitude toward school as being low, while student response would indicate these categories are high. What are the causes of these discrepancies assuming the responses of both groups are valid? How, for example, can 82 per cent of all pupils indicate a hope to go to college yet possess characteristics, as seen by teachers, that mitigate against further education? Understanding this complex problem is crucial to developing an effective program.

RESULTS OF PARENT SURVEY

Rationale

To a significant extent, the objectives of the various ESEA projects are directed toward achieving more active parent participation and interest in the school. The Parent Education Project has this goal as its major objective. It is presumed that the motivation of students toward school is largely related to the interest and involvement of the parents in their child's education. The survey was not given with the intention of measuring the effectiveness of projects per se. In all probability, parents would know little about the Education Act projects or services and certainly would not know projects by name. Instead, the strategy was to measure over-all interest and involvement in the school and obtain their reactions in terms of observable behaviors of their own children.

Description of the Survey

From a listing of all pupils enrolled in each target and control school, a five per cent random sample was drawn. From this sample a group of 20 pupils was selected randomly from each public school and a corresponding percentage from each non-public school. The parents of these children were interviewed individually by para-professional workers employed under the Parent Education Project. In control schools, interviews were made either by parent aides or through volunteer help of the P.T.A. In cases where the parents identified in the sampling process could not be interviewed, workers were instructed to contact the next parent on the master list. Of the original sample, 72.8 per cent were interviewed.

The interview consisted of reading a fourteen item questionnaire to which the respondent answered "Much," "Some," "Not at all," to each item.* For analytic purposes, the responses "Much" and "Some" were grouped together as affirmative responses while "Not at all" was considered a negative response.

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* The parent survey form is shown in the appendix.

Method of Analysis

The responses of parents were grouped in two ways: by type of school (PT, ST, C) and grade level (elementary, secondary) in which their child was enrolled. The general hypothesis that PT>ST>C was tested by chi square analyses of affirmative responses for each item disregarding grade level. Similarly, chi square analyses were made by grade level differences disregarding type of school.

Results

Per cents of affirmative parent responses to each questionnaire item, by type of school and grade level of child, are shown in Table 6. Inspection of the total response column indicates that 85 per cent of all parents sampled answered affirmatively to all items. The items receiving the highest (97%) affirmative responses were: "Does (your child) like school?" and "Do you like (school's name) school?" Ninety-five per cent of the parents believe teachers and principals are "interested" in their children, and 94 per cent believe their children are improving in their schoolwork.

When asked, "Are you in any way active in the school?" only 37 per cent answered affirmatively; yet, 81 per cent indicated that they were encouraged to participate in school activities, and 90 per cent wish to "know more about" their child's school. If one accepts these responses as valid, there seems to be a fertile field for more parent participation if ways can be devised to attract them or possible school-home barriers can be lowered. It is unfortunate that the instrument did not explore why parents do not participate in the school. Such questions will be included in next year's survey.

Table 6. Percents* of Affirmative Responses to Parent Questionnaire Items by Type of School and Grade Level in which Parent's Child is Enrolled.

ITEMS	PRIMARY TARGET Elem.		SECONDARY TARGET Elem.		CONTROLS Elem.		TOTAL ALL RESPONSES
	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.	
N=	(203)	(73)	(312)	(50)	(40)	(38)	(716)
1. Is ** improving in (his or her) schoolwork?	92%	99%	93%	96%	93%	95%	94%
2. Does ____ study at home?	91	88	90	92	88	92	90
3. Does ____ like school?	97	99	97	100	90	95	97
4. How interested do you think the teacher and principal are in ____?	99	100	93	96	85	82	95
5. Does the school help ____ stay out of trouble in the neighborhood?	91	97	76	94	70	72	83
6. Does ____ read at home?	95	95	92	96	95	89	93
7. Has ____ become more helpful around the house because of what (he or she) is learning in school?	79	88	70	94	68	68	76
8. Does the school help ____ behave better at home?	92	94	82	94	70	62	85
9. Does the school help you do more things with ____?	89	96	80	90	78	67	84
10. Has the school helped ____ in the use of (his or her) out-of-school time?	84	90	80	92	78	65	82
11. Have you been encouraged to participate in school activities?	84	81	82	78	73	70	81
12. Are you in any way active in school?	42	47	32	47	28	16	37
13. Do you like ____ school?	99	96	97	94	100	92	97
14. Would you like to know more about ____ school?	89	99	92	96	80	70	90
MEAN %	87	91	83	90	78	74	85
	88		85		76		

*All percents are rounded to nearest whole number.

**The interviewer inserted the child's name in the blank spaces as the question was read.

Further inspection of Table 6 reveals highly similar results among parents in PT, ST, and C school areas as well as between elementary and secondary level schools. No chi square statistic reached the five per cent level of significance among PT, ST, and C schools except item 12, "Are you in any way active in school?" The general hypothesis of PT > ST > C was confirmed for this item. Since the Parent Education Project operates in both PT and ST schools, the fact that PT schools exceeded ST schools probably means that parent activity in school is encouraged through several projects, e.g., the Early Childhood Education Project, which operates mainly in PT schools.

Summary and Conclusions

A standardized interview was given to a random sample of 716 parents in target and control school areas. Interviews were given by parents living in the area and working in the Parent Education Project.

The conclusions are:

1. There was an expression by parents of high positive valence toward school. For example, 97 per cent of the parents like the school their child attends and believe their children like the school.
2. While parents seem to be highly interested in school, the amount of active participation is relatively low as shown by the fact that only 37 per cent indicated that they were active in the school. It is inferred that more ways need to be discovered to attract parents to the school and to identify possible barriers to their more active participation.
3. Parents of elementary school children responded similarly to parents of secondary school children in relation to all items on the questionnaire.
4. Parents of children in PT, ST and C schools responded similarly to all questionnaire items with one exception. The item "Are you in any way active in school?" was responded to most affirmatively by parents of children in PT schools, followed by parents from ST and C schools. It was only for this item that the general hypothesis was confirmed: PT > ST > C. It is presumed that the large number of projects operating in the PT schools probably had the effect of bringing parents into active contact with the school.

PUPIL ACADEMIC ACHIEVEMENT

Rationale

Most of the objectives of the Education Act projects aim at changing pupil behavior in various ways. Many of these changes may be viewed as changes in personality or value structure, e.g., self-image or the value to prize education. Important as these objectives are, a sustained increase in academic achievement would be a highly desirable result of the program. To a large extent, objectives other than higher achievement are viewed as intermediate steps or pre-conditions to higher achievement. Increased pupil attendance, motivation and self-concept, for example, are usually valued not only because of their presumed intrinsic worth, but also because it is believed that with these characteristics pupils will achieve better. Certainly the traditional and still most accepted purpose of formal education is to provide pupils with the basic academic tools thought to be needed to function in our society. It is no matter of chance that state and federal authorities insist on the measurement of academic achievement in evaluating Education Act programs. Implicitly or explicitly, each of the thirteen projects composing the Education Act program in 1965-66 was aimed at increasing pupil achievement.

As important as increased achievement may be, numerous studies measuring the effects of various compensatory education efforts reveal that higher achievement is extremely difficult to attain, especially over sustained periods of time. One criticism of such studies is that usually too much is expected over short periods of time. Habits built up over several years cannot be broken down over short periods, regardless of the intensity of treatment. New habits are much more easily acquired than old habits are discarded. To a large extent, perhaps, there must be more emphasis on the latter than on the former.

The data presented in this section are viewed primarily as baseline data. Comparisons of pupil achievement for the school year 1965-66 in relation to previous years are not made for several reasons. First, comprehensive test data over a number of years is not available for all grades. The city-wide testing program, for example, provides results by school only in grades two, four, and six. Secondly, the specific tests that were administered in the past were different from those used to establish achievement data for the school year 1965-66. In those grades where achievement data were based on the same test, the tests were administered at different times of the year, thus making achievement comparisons somewhat tenuous. Finally, comparisons of achievement against previous years, assuming valid comparisons could be made, would probably show little difference in achievement since the Education Act program was in operation for only a few months.

In addition to providing baseline data, the achievement test results presented in this section can serve other purposes. Analysis of test results, for example, can be used for diagnostic purposes. Such results can be used to determine the emphasis and direction of remedial efforts for successive years. Secondly, achievement results obtained over successive grade levels do reveal the pattern of achievement typical of disadvantaged children. Patterns of academic development will be useful to teachers in terms of understanding pupil growth. Changes in these patterns, in effect, represent the goal of many of the Education Act projects.

Method of Analysis

In all target and control schools standardized achievement tests were administered to grades two through eleven in May, 1966, with the exception of grade six, where public school pupils were tested in February as part of the regular city-wide testing program. The tests were administered by teachers, but machine scored in all grades except grades two and three, where pupils are too young to use separate answer sheets. In the latter two grades, tests were scored by the Division of Evaluation Services. All tests were administered in late May within a period of approximately one week. The test battery and test form given at each grade level are shown below:

Standardized Achievement Tests Given by Grade Level

Grade Level	Test Used
2	Metropolitan Primary I, Form A
3	Stanford Primary II, Form X
4	Stanford Intermediate I, Form X
5 & 6	Stanford Intermediate II, Form X
7,8, & 9	Stanford Advanced, Form W
10 & 11	Stanford High School Basic, Form W

The above tests were analyzed only for pupils in regular classes, thus excluding pupils in slow learning classes, classes for the blind and deaf, and special classes for the physically and emotionally handicapped children.

Distributions of raw scores for each subtest were made for primary target, secondary target, and control schools. From these frequency distributions, the three quartile points were computed and finally converted into grade scores in grades two through nine. The quartile points in grades ten and eleven were converted to standard scores rather than grade scores. (Grade scores at the high school level are inappropriate.)

Previous experience with the newly revised Stanford Battery has shown the norms to be extremely demanding, i.e., it is a "difficult" test. The reason is that the pupils on whom the norms were established tended to be above average in scholastic aptitude. The mean I.Q. of the standardization population was between 106 and 109. When such tests are used on a population similar to that of Cincinnati, where the mean I.Q. of the general population is close to 100, the consequence is that grade scores will appear to be lower, unless scholastic aptitude is taken into account.

Adjusted grade scores based on pupil scholastic aptitude will not be presented except for illustrative purposes since the basic intent of this study is to provide baseline data. Since the same batteries will be administered in May, 1967, the focus will be on increase from May, 1966, rather than on the measurement of achievement compared to national norms, *per se*. The tests used were selected primarily because of the appropriateness of their content.

Results

The results of the standardized achievement tests given in grades two through nine are shown in Table 7 and those for grades 10 and 11 are shown in Table 8. The results for grades two through nine are reported as grade scores, while those of grades 10 and 11 are reported as standard scores. Only one senior high school is a primary target school, while there are no secondary or control senior high schools.

The data shown in Table 7 are numerous and complex but do reveal some very interesting results. Close inspection reveals that the achievement of pupils in primary target, secondary target, and control schools is distinctly different. In contrast to the general hypothesis of PT>ST>C, the test results reveal the reverse situation, i.e., C>ST>PT. This result certainly comes as no surprise for, indeed, it is these achievement differences that were used in identifying PT, ST and C schools. As will be seen more clearly later on, secondary target schools exceed the general achievement of the primary target schools by 1 to 4 months at the median level of achievement. The control schools, on the other hand, exceed the secondary target schools by 1 to 13 months. Thus, it is apparent that there is a closer similarity between PT and ST schools than there is between target and control schools. It is also evident that the median grade scores at all grade levels do not reach the norm.

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School. (a)

Grade Level (Grade Norm) Battery Used Subtest	Type of School Primary Target			Secondary Target			Control		
Quartiles:	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3
GRADE 2 (Norm: 2.9)		N=1452(b)			N=2303			N=347	
Metropolitan Primary I, Form A									
Word Knowledge	1.9	2.2	2.9	1.9	2.4	2.9	1.9	2.2	2.9
Word Discrimination	2.0	2.5	3.1	2.0	2.5	3.1	2.1	2.5	3.6
Reading	1.9	2.2	2.9	1.9	2.3	3.0	1.9	2.3	3.2
Battery Mid-Score	1.9	2.2	2.9	1.9	2.4	3.0	1.9	2.3	3.2
GRADE 3 (Norm: 3.9)		N=1328			N=2475			N=344	
Stanford Primary II, Form X									
Word Meaning	2.1	2.7	3.1	2.3	2.8	3.3	2.6	3.1	4.0
Paragraph Meaning	2.0	2.6	3.1	2.2	2.7	3.2	2.5	3.0	3.7
Arithmetic Computation	2.6	3.0	3.6	2.6	3.1	3.7	2.9	3.6	4.2
Arithmetic Concepts	2.2	2.6	3.2	2.3	2.7	3.4	2.6	3.2	4.4
Battery Mid-Score	2.2	2.7	3.2	2.3	2.8	3.4	2.6	3.2	4.1

(a) All tests were administered in May, 1966 with the exception of the sixth grade which was tested in February, 1966. The grade norm, therefore, is the grade level plus 9 months except for grade six where the grade norm is 6.6.

(b) In each case N equals the average number of pupils taking each subtest.

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School.

Grade Level (Grade Norm) Battery Used Subtest	Type of School								
	Primary Target			Secondary Target			Control		
Quartiles:	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3
GRADE 4 (Norm: 4.9)	N=1300			N=2375			N=306		
Stanford Intermediate I, Form X									
Word Meaning	2.9	3.3	3.9	3.0	3.5	4.2	3.1	3.8	4.7
Paragraph Meaning	2.6	3.0	3.8	2.7	3.2	4.1	2.8	3.6	4.7
Spelling	3.2	3.8	4.5	3.3	3.9	4.6	3.3	3.9	4.7
Word Study Skills	2.2	2.7	3.3	2.3	2.8	3.7	2.4	2.9	4.3
Language	2.6	3.0	3.6	2.6	3.1	3.9	2.7	3.2	4.2
Arithmetic Computation	3.1	3.7	4.3	3.2	3.8	4.5	3.3	4.0	4.5
Arithmetic Concepts	2.6	3.3	4.2	2.7	3.6	4.5	2.8	3.9	4.8
Arithmetic Applications	3.1	3.7	4.2	3.2	3.9	4.5	3.3	4.0	4.8
Social Studies	3.4	3.7	4.1	3.5	3.8	4.2	3.5	3.8	4.4
Science	3.3	3.6	4.0	3.4	3.7	4.2	3.4	3.8	4.4
Battery Mid-Score	3.0	3.5	4.1	3.1	3.7	4.2	3.2	3.8	4.6
GRADE 5 (Norm: 5.9)	N=1161			N=2130			N=269		
Stanford Intermediate II, Form X									
Word Meaning	3.2	3.9	4.7	3.5	4.2	5.3	3.6	4.5	5.9
Paragraph Meaning	3.1	3.9	4.7	3.4	4.2	5.2	3.5	4.4	5.7
Spelling	3.9	4.6	5.6	4.0	4.8	6.0	4.2	5.1	6.2
Language	3.0	3.4	4.2	3.1	3.7	4.8	3.1	3.9	5.5
Arithmetic Computation	3.7	4.5	5.2	4.3	4.8	5.4	3.8	4.6	5.6
Arithmetic Concepts	3.7	4.4	5.1	3.9	4.5	5.3	4.2	4.9	6.0
Arithmetic Applications	3.6	4.1	4.8	3.7	4.3	5.2	3.6	4.4	5.6
Social Studies	3.8	4.2	4.7	3.8	4.3	5.0	3.9	4.5	5.5
Science	3.4	3.8	4.4	3.6	4.1	4.9	3.6	4.3	5.5
Battery Mid-Score	3.6	4.1	4.7	3.7	4.3	5.2	3.6	4.5	5.6

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School.

Grade Level (Grade Norm) Battery Used Subtest	Type of School Primary Target			Secondary Target			Control		
Quartiles:	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3
GRADE 6 (Norm: 6.6) (c)	N=1120			N=1831			N=268		
Stanford Intermediate II, Form X									
Word Meaning	3.8	4.6	5.6	3.9	4.7	5.7	4.1	5.1	6.4
Paragraph Meaning	3.8	4.6	5.7	3.9	4.7	5.9	4.2	5.4	7.1
Spelling	4.2	5.1	6.3	4.3	5.3	6.5	4.5	5.6	6.7
Language	3.3	4.1	5.2	3.5	4.4	5.5	3.5	4.8	6.7
Arithmetic Computation	4.3	5.0	5.8	4.3	5.1	5.9	4.9	6.0	7.9
Arithmetic Concepts	4.0	4.7	5.5	4.1	4.8	5.8	4.4	5.7	7.8
Arithmetic Applications	3.9	4.5	5.5	4.0	4.7	5.6	4.2	5.7	7.4
Battery Mid-Score	3.9	4.6	5.6	4.0	4.7	5.9	4.2	5.6	7.1
GRADE 7 (Norm: 7.9)	N= 945			N=1860			N=307		
Stanford Advanced, Form W									
Paragraph Meaning	4.3	5.2	6.1	4.6	5.6	6.6	5.4	6.4	8.0
Spelling	4.7	6.1	7.4	5.1	6.6	7.9	5.7	7.0	8.0
Language	4.0	4.8	5.8	4.3	5.2	6.4	4.7	6.1	7.4
Arithmetic Computation	4.5	5.4	6.2	4.7	5.6	6.3	5.2	6.0	7.2
Arithmetic Concepts	5.2	6.0	6.8	5.3	6.0	6.9	5.8	6.4	7.6
Arithmetic Applications	5.3	6.0	7.0	5.3	6.1	7.2	5.7	6.6	7.6
Social Studies	4.8	5.5	6.4	5.0	5.9	6.8	5.7	6.6	8.0
Science	4.6	5.2	5.9	4.7	5.5	6.4	5.0	6.2	7.6
Battery Mid-Score	4.7	5.5	6.3	4.9	5.8	6.7	5.6	6.4	7.6

(c) These data do not include non-public school children since they were tested in May rather than February.

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School.

Grade Level (Grade Norm) Battery Used Subtest	Type of School Primary Target			Secondary Target			Control		
Quartiles:	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3
GRADE 8 (Norm: 8.9)	N= 876			N=1685			N=260		
Stanford Advanced, Form W									
Paragraph Meaning	5.0	6.0	7.1	5.3	6.4	7.9	6.3	7.6	10.1
Spelling	5.2	6.7	7.7	6.0	7.3	8.9	6.7	7.9	9.9
Language	4.6	5.4	6.6	4.7	6.1	7.6	5.8	7.0	8.9
Arithmetic Computation	5.1	5.8	7.5	5.5	6.4	8.0	6.3	7.6	8.6
Arithmetic Concepts	5.6	6.5	7.7	5.9	6.7	8.0	6.3	7.5	9.3
Arithmetic Applications	5.6	6.5	7.7	5.7	6.8	7.8	6.2	7.4	8.4
Social Studies	5.2	6.2	7.2	5.6	6.6	7.8	6.6	7.7	9.1
Science	5.0	5.8	6.9	5.4	6.2	8.0	6.1	7.6	10.5
Battery Mid-Score	5.2	6.1	7.3	5.6	6.5	8.0	6.3	7.6	9.2
GRADE 9 (Norm: 9.9)	N= 630			N=1276			N=229		
Stanford Advanced, Form W									
Paragraph Meaning	5.4	6.4	7.7	5.6	6.6	8.2	6.8	8.7	10.7
Spelling	6.2	7.7	9.4	6.4	7.6	9.2	6.8	8.4	10.6
Language	4.9	5.8	7.2	5.2	6.3	7.6	6.0	7.6	9.7
Arithmetic Computation	5.7	6.6	8.2	5.8	6.8	8.2	6.4	7.9	9.2
Arithmetic Concepts	6.2	7.1	8.1	6.2	7.2	8.4	6.6	7.8	10.3
Arithmetic Applications	6.0	7.2	7.9	6.0	7.2	8.1	6.7	7.9	9.9
Social Studies	5.8	6.7	7.8	6.0	6.8	8.1	7.0	8.2	10.6
Science	5.4	6.4	8.1	5.6	6.7	8.8	6.5	8.4	10.6
Battery Mid-Score	5.8	6.7	8.0	6.0	6.8	8.2	6.8	8.1	10.5

Table 8. Summary of Standardized Achievement Test Standard Scores[1] for Grades 10 and 11 in Primary Target School.

Grade Level (Norm) Battery Used Subtest	Standard Scores Q_1	 Q_2 Mdn.	 Q_3
GRADE 10 (50)		N=402	
Stanford High School, Form W			
English	bel. 25	25	25
Reading	36	41	46
Numerical Competence	35	41	46
Mathematics, Part A	39	45	49
Battery Mid-Score	36	41	46
GRADE 11 (50)		N=259	
Stanford High School, Form W			
English	bel. 25	25	25
Reading	38	43	48
Numerical Competence	35	41	46
Mathematics, Part A	38	44	50
Battery Mid-Score	37	42	47

[1] The standard scores have a mean of 50 and a standard deviation of 10.

In order to detect relative strengths and weaknesses of the pupils tested, the subtests which showed the highest achievement for each grade level were noted as well as the subtests which showed the lowest achievement. There was a great deal of consistency among PT, ST and C schools in terms of their relative performance on subtests. All three types of schools showed the highest subtest performance to be in the area of spelling, followed by arithmetic computation. The subtest on which pupils did least well was in the area of language, dealing with grammar, punctuation, sentence structure, etc. On all batteries containing a language subtest, performance on this subtest was lowest, with the exception of grade four where it was second lowest. Word study skills in grade four showed the lowest relative achievement.

Why should spelling and arithmetic computation be consistently higher than achievement in other areas? Is this a function of our curricular emphasis? What do spelling and arithmetic computation have in common? Are they types of skills that are subject to drill and repetition and therefore relatively easy to teach? This phenomenon must be studied, for if special techniques that are used in teaching these subjects are especially effective, such techniques might be applied in other areas.

Why should pupils be consistently lower on the language tests? Is this an area that needs more emphasis in the curriculum; or is it simply an area that is much more difficult to teach? Are the unique characteristics of disadvantaged children such that they have the greatest difficulty in learning language skills? Literature certainly reveals that poor language is one of the most distinguishing features which characterizes disadvantaged children. Perhaps the problem in teaching language is that much unlearning must take place before new learning can occur.

Some of the essential features of Table 7 may be seen more clearly when only the battery mid-scores are reported by grade. Perhaps the most striking fact shown in Table 7 is the so-called "cumulative deficit." In this context, it means that the older the child becomes, the greater is his deviation from the norm. Thus, there is no "catching up" phenomenon. To illustrate, consider the battery mid-scores (Q_2) for primary target schools from grades two through nine. When these scores are subtracted from the appropriate grade norm the following deviations from the norm are obtained:

Grade	Months of Deviation From Norm For PT Schools (Q_2)
2	- 7
3	-12
4	-14
5	-18
6	-20
7	-24
8	-28
9	-32

The preceeding data are typical for ST and C schools as well as for other quartile points. The data show that by the time these children complete grade three they are approximately one year below norm in general achievement. By the end of grade six, they are about two years below norm and by the end of grade nine, they are about three years below the norm. Such findings are not peculiar to Cincinnati.

The cumulative deficit is noted not only by comparing performance against national norms but also by comparing differences within the same set of pupils between quartile points by grades. For example, the differences between Q_2 and Q_1 in battery mid-scores in primary target schools from grades two through nine are: 3, 5, 5, 7, 8, 9, and 15 months, respectively. Thus, achievement differences within the same set of schools become largest with age and grade.

Lest this phenomenon be misunderstood to mean that the achievement of these pupils becomes relatively lower with successive grades, it would be well to translate these data to percentiles. Percentiles reflect the relative rank order of performance with respect to the normative population. To illustrate that relative achievement remains approximately the same, we may consider the Paragraph Meaning subtest, which is a part of the test battery, given from grades three through nine in primary target schools. Below are shown the grade scores for each grade (taken from Table 7) and their percentile equivalents.

Grade	Paragraph Meaning Median Grade Score PT Schools	Deviation From Norm (in months)	Percentile Equivalent of Grade Score
3	2.6	-13	11
4	3.0	-19	8
5	3.9	-20	10
6	4.6	-20	12
7	5.2	-27	12
8	6.0	-29	12
9	6.4	-35	12

From the preceeding, it is seen that while grade scores increasingly deviate from national norms, the relative status of achievement is fairly uniform, ranging from a low at the eighth percentile in grade four to a high at the twelfth percentile in grades six through nine. Obviously, pupils deviate from the national norm more in higher grades than in lower grades because there is more "room" for difference to occur. This result is characteristic in all schools, regardless of pupil ability or achievement. Several other analyses similar to that shown above were made. There was generally a slight rise in percentile rank with successive grade level (in spite of the fact that deviation from norm increased).

The test results for grades 10 and 11 shown in Table 8 are reported as standard scores with a mean of 50 and a standard deviation of 10. The relatively low performance on the language test noted in grades four through nine is continued in grades ten and eleven as shown by the English test results. The English test measures many of the same areas as the language test (capitalization, punctuation, grammar) in earlier grades. Performance on the mathematics test was highest, a fact which is reminiscent of relatively high achievement on the arithmetic computation test in the elementary grades.

While the grade score comparison from grade to grade shows that pupils increasingly deviate from norm as they get older, their rate of educational growth is highly uniform. This fact is shown when battery mid-scores are plotted against national grade norms for each grade as in Figure 1. The pattern of development can almost be characterized as a straight line which is, of course, a function of the way grade norms are developed. The rate of growth for target school children is usually five to seven months per school year. (It should be remembered that the normative child in the Stanford Battery was well above average in scholastic aptitude.)

Is the achievement of these pupils good? Obviously the answer depends on what is meant by "good." Many would believe that achievement below norm is not good, while achievement above norm is good. Such reasoning is absurd since a norm is an average which, by definition, relegates 50 per cent of a population above norm and 50 per cent below that point. Such reasoning would indicate 50 per cent failure regardless of excellence.

Another approach to evaluating test results is to ask what is expected in terms of a pupil's potential. This approach has its limitations too since no one knows the true potential of human capabilities. While scholastic aptitude tests (so-called I.Q. tests) do not measure pure hereditary mental ability, they do predict academic success reasonably well. Such tests are themselves achievement tests, the difference being in the way norms are developed. In spite of their limitations, theoretical scholastic aptitude tests do provide the best basis for achievement expectancy that is currently available. If one is willing to accept this basis for expectancy, the actual achievement of these pupils is about at par with other pupils nationally with similar scholastic aptitude.

Consider, for example, the sixth grade achievement results of pupils in primary target schools. These pupils had a median I.Q. of 88.10 as measured by the Lorge-Thorndike Verbal Ability Tests in the fall of the sixth grade. From the Standard Achievement Manual the average deviations from norm made by pupils nationally with similar scholastic ability can be determined. For example, a youngster with an (Otis) I.Q. of between 82 and 90 who is in the sixth grade normally would achieve 22 months below norm in Word Meaning. Since the sixth grade tests were given in February, the norm is 6.6. Subtracting 22 months from 6.6 yield an expectancy of 4.4. The actual and expected achievement of average sixth grade pupils in

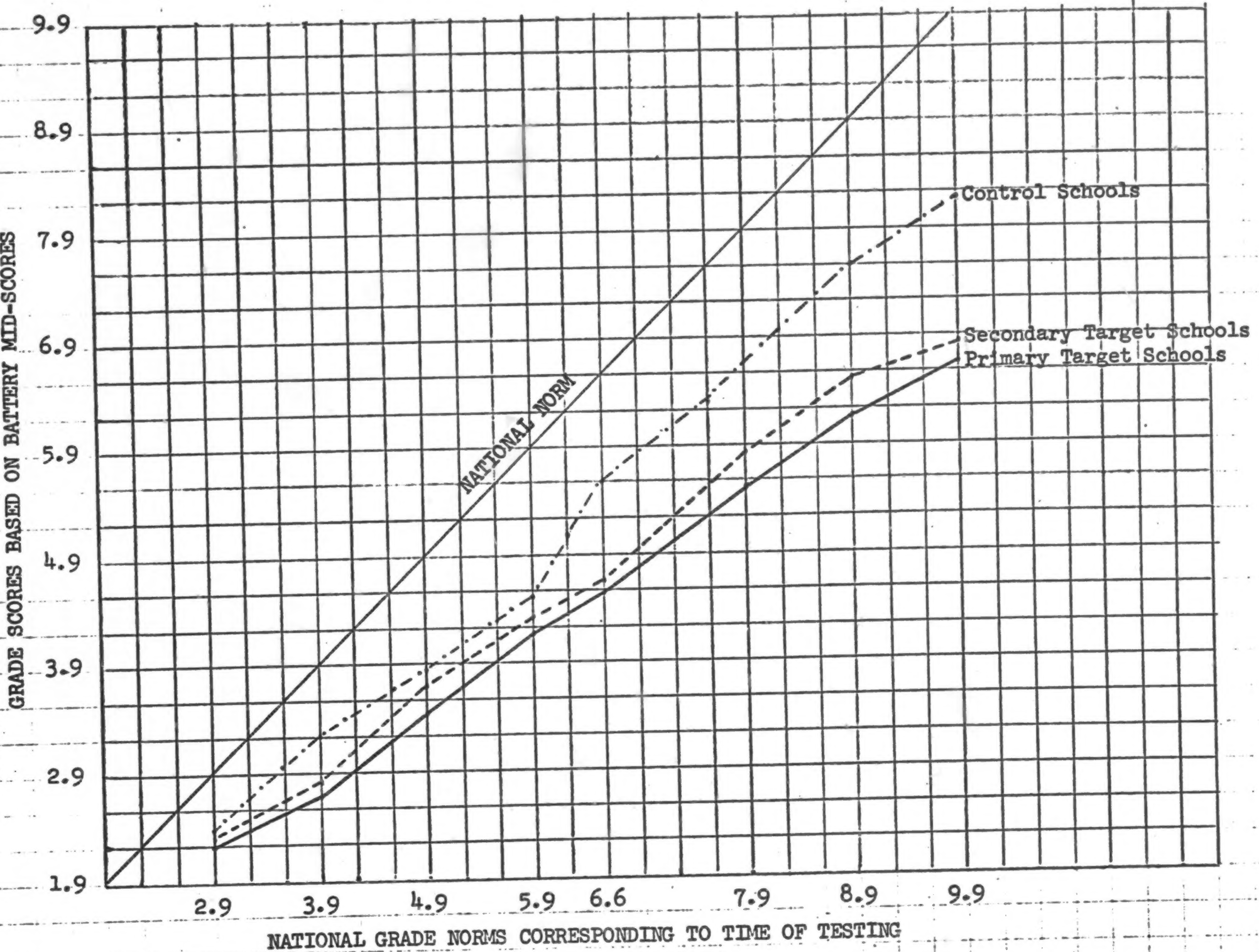

Figure 1. Battery Mid-Scores (Grade Scores) Plotted Against National Grade Norms from Grade Two through Nine for Primary Target, Secondary Target, and Control Schools.

primary target schools on each subtest is shown below.

	Actual	Expected	Difference
Word Meaning	4.6	4.4	+2
Paragraph Meaning	4.6	4.4	+2
Spelling	5.1	4.7	+4
Language	4.1	4.1	0
Arithmetic Computation	5.0	5.4	-4
Arithmetic Concepts	4.7	4.9	-2
Arithmetic Applications	4.5	4.6	-1

The above data show that reading and language achievement is at or above expectancy while arithmetic achievement is below expectancy as compared to pupils of similar scholastic aptitude. As a whole, however, the general achievment is about at par with an eight month total above expectancy and a seven month total below. These data are given only for illustrative purposes since the primary intent of this section is to establish baseline data. Certainly project staff members will wish to study these data comprehensively to determine whether certain content areas are consistently above or below expectancy.

Summary and Conclusions

The purpose of this section was to establish baseline academic achievement data upon which to evaluate the Title I program next year. Standardized achievement tests covering the areas of reading, arithmetic, language, and others were administered in May, 1966, to grades two through eleven. Sixth grade tests were given in February, 1966. All primary target, secondary target and control schools were tested. Summaries of test results by grade, sub-test and type of school were reported in quartiles. Results were compared among types of schools and among subtests, and trends in educational development were noted. A discussion regarding the evaluation of test results was presented, wherein the concept of achievement expectancy based on scholastic aptitude was introduced.

The major conclusions are as follows:

1. As expected, control schools showed higher general achievement than secondary target schools which, in turn, showed higher general achievement than primary target schools. This finding simply confirms our classification of schools in which the emphasis in services is given in primary target schools.
2. These children achieved relatively highest on spelling and arithmetic computation and relatively lowest on language. This finding was consistent from early grades through high school.
3. As target school children progress through the grades, they increasingly deviate from national achievement norms, although they do appear to remain relatively constant (perhaps with a slight increase) in their ranked position (percentile rank) with respect to the national group.
4. The educational development (as shown by cross-sectional data) of target school children is highly uniform. Their average annual growth in months of achievement is about five to seven months.
5. Based on scholastic aptitude tests as predictors of school achievement, target school children achieve about at expectancy. In this regard it is apparent that a major goal of the whole Education Act program is to enable them to achieve above this expectancy.

PUPIL SELF-IMAGE

Rationale

Improvement of pupil self-image is a key objective of the Education Act program in Cincinnati. In identifying the special educational needs of disadvantaged children to serve as a basis for organizing projects, teachers, principals and various personnel specialists repeatedly emphasized the importance of enhancing the self-image of these children. This is in contrast to the typical teacher tendency to identify higher achievement as the most pressing need, or such goals as higher motivation, better work-study habits, etc. Personnel who work with disadvantaged children believe a child must feel good about himself before he is capable of school achievement. A positive self-image is seen as the underpinning for school and academic motivation, which in turn are viewed as prerequisites to higher school achievement. Thus, all the projects which give direct service to children have as one of their objectives the strengthening of pupil self-image.

Important as this self-image may be, its measurement is most elusive. Before measurement can be accomplished, there must be an accepted definition of what is to be measured. Agreement on the definition of self-concept is lacking. For purposes of this study, however, self-concept is defined as the picture a person derives of himself from his bodily experiences, drives, and interpersonal experiences. The self-concept, then, involves all aspects of the person as they are organized around his self-image. Researchers have found that self-concept becomes more or less stable over time and is a characteristic structure of the ego.

There is also considerable research support for the belief that a more positive self-concept accompanies successful adjustment and achievement. Although a definite cause-effect relationship cannot be established, it seems reasonable to speculate that those services that aim at establishing success patterns within the individual will help to improve his self-image. Such services as pre-school instruction, remedial and resource teachers, and after school enrichment activities, therefore, seem most likely to improve the way the pupil sees himself. Consistent with the hypothesis of PT > ST > C, it is believed that the more concentrated services in the primary target schools will have the greatest involvement.

Description of Survey

Three instruments were used to evaluate self-concept: What I Am Like, Attitude Toward Self and School, and the House-Tree-Person test. These instruments were administered to random samples of pupils in target and control schools. What I Am Like was given to 847 pupils in grades four through nine, Attitudes Toward Self and School was used with a sample of 642 primary grade pupils and House-Tree-Person was taken by 1299 pupils in grades one through nine. All tests were administered by the Division of Psychological Services.

Although these three instruments may be viewed as having construct or theoretical validity, none has established predictive validity. As highly experimental measuring devices, they should not be considered generally reliable for individual pupil diagnosis. Rather, the purpose toward which these instruments are directed in this study is group comparison. Thus, the reliability of the instruments need not be as high as would be necessary for individual use. Since the tests were given only once at the end of the school year, the results must be viewed as baseline data.

What I Am Like. What I Am Like is an instrument developed by the Division of Psychological Services and the Division of Program Development to measure self-concept by having pupils rate themselves on a five point, bi-polar adjective scale. This technique is based on Osgood's concept of the semantic differential.

The instrument consists of three subtests of ten items each. The first subtest, What I Look Like, consists of adjectives characterizing physical attributes. The second, What I Am, attempts to measure self-image from a psychological point of view. The third, What I Am Like When I Am With My Friends, concerns social attributes. A copy of this instrument is found in the appendix.

For each item on What I Am Like a score of five represents the positive pole of the trait, and a score of one the negative pole. A rating of three may be viewed as neutral. In a few cases it was difficult to assign positive and negative polarity. On the instrument itself the position of positive and negative poles was randomized to avoid a psychological set in rating the items.

Attitudes Toward Self and School. The Attitudes Toward Self and School or "Faces" test consists of 18 items, each having two circles drawn to represent a smiling and frowning face. The pupils is asked to blacken the nose of the picture that describes how he feels when the examiner reads a particular statement. For example, "How do you feel about how well you read?" and "How do you feel when you get your report card and take it home?" were two of the 18 items. It was assumed that if a pupil marked the smiling face this indicated a positive attitude toward whatever was being measured. On the other hand, if he marked the frowning face, this was assumed to mean that his feelings were more negative.

Although the items were selected on the basis of previous research in motivation and self-concept, no validity or reliability evidence is available for the "Faces" instrument. Rather than scoring the instrument, the responses to individual items were examined for information about self-concept and school motivation.

House-Tree-Person. The House-Tree-Person test is a projective technique in which pupils draw these three commonly experienced objects. The technique assumes that children (and others) express their drives, needs and inter-personal experiences in the drawings they make. A review of several studies relating self-concept to children's drawings revealed 18 possible hypotheses, eight of which seemed to have the support of experimental evidence and clinical cross-validation by more than one author. Pupil drawings were scored for the following eight factors.

1. Size of the first person drawn. Research indicates that a person's self evaluation affects the way he draws the human figure and that largest figures are drawn by children with more positive self evaluation.
2. Degree of discrepancy of first person from the vertical position. Hammer concludes that the self-image can be projected in the person drawing. A toppling figure reflects the subject's concern about, and desire to surrender to, environmental forces.
3. Detailing in drawings. Hammer describes this as an index of feelings of adequacy. He states that changes in a child's self perceptions can be noted through changes in various details from one drawing to another.
4. Detailing of face in the first person drawn. This is an extension of number 3. It is important in that self-concept is focused in the head and the face of the person drawing.
5. Position of drawn wholes on the pages. Children who center their work on the paper tend to be more self-directed and secure.
6. Degrading of drawings. This occurs when the child feels his experiences have beaten him and left him emotionally crippled.
7. Sex of the person drawn first. Sex identification is related to self-concept. Most people draw their own sex first.

8. Distortion of drawings. Drawings are the product of experience. The effects of experience will modify the detailing, proportion and perspective produced.

A scoring system was developed to measure the degree of presence of each factor. Each factor was scored on a three-point scale making the maximum score 24, i.e., eight factors times three points each. Since this scoring system is unique, no norms are available.

Method of Analysis

The data yielded by the three self-concept instruments were compiled and treated to suitable statistical tests. In each case a comparison of primary target, secondary target and control schools was made to test the general hypothesis: PT > ST > C.

Results

What I Am Like. Mean ratings were computed for each of the 30 bipolar traits on What I Am Like. These were figured separately for PT, ST, and C schools at each level, elementary and secondary. These means are shown in Table 9 .

Inspection of this table shows a high degree of similarity in the means for individual items as well as subtest means. The eighteen subtest means reported by level and type of school vary from a low of 3.51 to a high of 3.95; thus showing a high degree of similarity. The over-all subtest means for What I Look Like, What I Am, and What I Am Like When I Am With My Friends are seen to be 3.88, 3.82, and 3.77, respectively. Thus, it would appear that there is little difference in the physical, psychological, and social concepts of self as measured by this instrument.

Only fourteen means out of the 180 presented in Table 9 were below the 3.00 point, which may be viewed as the neutral point. Most of the twelve means below the neutral point were obtained from items in which it was

Table 9. Summary of Means* for "What I Am Like" Administered to Random Samples of Elementary and Secondary Level Pupils in Primary Target, Secondary Target, and Control Schools.

		ELEMENTARY			SECONDARY			
ITEM		Primary Target N=169	Secondary Target N=280	Control N=41	Primary Target N=124	Secondary Target N=209	Control N=24	Total Item Means N=847
A.	What I Look Like							
1.	Short - Tall	3.12	3.16	3.32	3.23	3.20	3.08	3.18
2.	Slow - Quick	3.99	3.89	3.98	3.87	3.69	3.88	3.86
3.	Small - Big	3.10	3.10	3.05	3.10	2.99	2.79	3.06
4.	Weak - Strong	3.98	3.95	3.80	3.85	3.67	3.33	3.85
5.	Dirty - Clean	4.64	4.63	4.59	4.84	4.72	4.71	4.69
6.	Lazy - Busy	4.32	3.20	3.07	4.01	3.72	3.58	4.05
7.	Ugly - Good Looking	3.88	3.97	3.71	3.86	3.65	3.29	3.83
8.	Fat - Thin	3.39	3.50	3.44	3.19	3.26	3.42	3.37
9.	Sick - Healthy	4.45	4.57	4.59	4.41	4.47	4.63	4.50
10.	Sleepy - Awake	4.50	4.57	4.44	4.44	4.26	4.38	4.45
	Subtest Means	3.94	3.95	3.90	3.88	3.76	3.71	3.88
B.	What I Am							
1.	Sad - Happy	4.32	4.40	4.24	4.26	4.04	4.25	4.26
2.	Nobody - Somebody	4.64	4.60	4.51	4.54	4.32	3.92	4.51
3.	Empty - Full	4.01	4.07	4.07	4.01	3.78	3.63	3.97
4.	Bad - Good	4.10	4.06	4.34	4.02	3.83	3.63	4.01
5.	Angry - Kind	4.20	4.17	4.29	4.17	4.06	3.83	4.15
6.	Question - Believe	3.43	3.40	3.10	2.98	3.19	3.08	3.27
7.	Shy - Bold	2.91	3.05	2.80	3.07	2.83	2.79	2.95
8.	Loser - Winner	3.61	3.49	3.61	3.57	3.27	3.13	3.47
9.	Unimportant - Important	3.86	3.78	4.02	4.00	3.66	3.33	3.80
10.	Dumb - Smart	3.93	3.93	4.10	3.93	3.65	3.46	3.86
	Subtest Means	3.90	3.90	3.91	3.86	3.66	3.51	3.82

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* The means in this table are based on a five point rating scale with one representing the negative pole of the trait and five the positive pole of the trait. A rating of three may be viewed as neutral. Each bipolar trait is listed with the negative pole first for ease of interpretation. The instrument, however, randomized positive and negative poles in the various items.

Table 9. Summary of Means* for "What I Am Like" Administered to Random Samples of Elementary and Secondary Level Pupils in Primary Target, Secondary Target, and Control Schools. (Continued)

ITEMS	ELEMENTARY			SECONDARY			
	Primary Target N=169	Secondary Target N=280	Control N=41	Primary Target N=124	Secondary Target N=209	Control N=24	Total Item Means N=847
C. What I Am Like When I Am With My Friends							
1. Receive - Give	3.98	3.98	3.83	3.65	3.58	3.83	3.82
2. Sad - Happy	4.62	4.60	4.73	4.37	4.38	4.50	4.52
3. Alone - Together	4.58	4.59	4.51	4.56	4.46	4.42	4.54
4. Hurt - Help	4.23	4.35	4.32	4.15	4.09	4.00	4.22
5. Listen - Tell	2.10	2.27	2.37	2.57	2.53	2.67	2.36
6. Fight - Agree	4.19	4.27	4.29	3.94	3.89	3.92	4.10
7. Little - Big	3.25	3.30	3.24	3.32	3.23	3.17	3.27
8. Enemy - Friend	4.59	4.60	4.61	4.67	4.58	4.63	4.60
9. Follower - Leader	2.91	2.79	3.02	3.00	3.06	3.04	2.93
10. Last - First	3.22	3.26	3.44	3.48	3.44	3.54	3.35
Subtest Means	3.77	3.80	3.84	3.77	3.72	3.77	3.77
GRAND MEANS BY TYPE OF SCHOOL	3.87	3.88	3.88	3.84	3.72	3.66	3.83

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* The means in this table are based on a five point rating scale with one representing the negative pole of the trait and five the positive pole of the trait. A rating of three may be viewed as neutral. Each bi-polar trait is listed with the negative pole first for ease of interpretation. The instrument, however, randomized positive and negative poles in the various items.

difficult to identify the positive from the negative pole, e.g., listen-tell. It would be most interesting to administer this instrument to a group of suburban pupils to determine how much of a difference, if any, there would be in a mean response to each item.

Inspection of the last column of Table 9 which lists the grand means for each item, ignoring school classification, reveals that the highest five means were obtained for: clean, 4.69; friend, 4.60; together, 4.54; happy, 4.52; and somebody, 4.51. Only three traits had an average response below the 3.00 mark: listen, 2.36; follower, 2.93; and shy, 2.95.

The data in Table 9 were analyzed through a three way analysis of variance; level of school, type of school, and subtest. The ten means within each subtest and within a given level and type of school were viewed as random samples of means each measuring what the subtest is intended to measure. Thus, the error variance was viewed as that represented within each of the 18 cells of the table. The strategy was to test for significance of over-all between variance. If this variance were found to be significant, separate tests for school level difference, type of school differences, and subtest differences would follow. The F-ratio obtained from the over-all between variance to within variance, however, had a value of less than one. Therefore, it was concluded that no significant difference in the means was apparent. With reference to the general hypothesis: PT>ST>C.

While the general hypothesis is not confirmed in these results, the data suggest that the over-all picture of self-concept is a positive one as evidenced by the mean rating of 3.83 for all items and all pupils.

Attitudes Toward Self and School. For each item on the "Faces" test the proportion of children marking the smiling face was computed for the PT, ST and C groups. These proportions are shown in Table 10 . In general terms, it would appear that most of these youngsters have fairly positive concepts of self and others, and their attitudes toward school seem basically positive, too. That is, since a majority of pupils marked the "smiling" face in each of the 18 items rather than the "frowning" face, their attitudes toward self and school seem essentially positive in nature. Because normative data or comparable data from other children is not available, however, this generalization must be considered tentative.

From the rank ordering of items described in Table 10, another generalization seems evident. Items 3, 9, 14, 6, 13, 18 and 15 all pertain to a child's attitudes toward school, and all of these items fall in the upper half of the rank order listing. This would seem to suggest that these children's attitudes toward school, especially, are positive. Their motivation seems to be fairly high.

On the other hand, those items which fall in the lower half of the listing seem to reflect two different kinds of concerns. Several items are "future" oriented (i.e., 4, 16 and 1), and other items refer to the way a child feels that other persons relate to him (i.e., 12 and 10). Obviously no firm conclusions can be drawn from these data at all, but there does seem to be a hint of negative outlook toward the future and a feeling of negative treatment by other persons (neighbors and other children). Future studies would be required to confirm the point, of course.

Chi square analyses were made for each item to test for differences among type of school. None of the 18 analyses showed significant differences. Thus, PT=ST=C with respect to self-image among primary grade children.

Table 10. Proportion of Children Marking "Smiling" Faces by Type of School and Item.

Item No.	Item	Primary Target N= 263	Secondary Target 322	Control 57
8.	About how healthy and strong you are	97%	95%	96%
3.	When you have a chance to learn something	94	96	96
9.	About how well you read	94	93	98
14.	About how much you know	92	92	100
6.	When you think about how fast you learn	92	89	95
13.	When you get your report card and take it home	92	83	84
18.	When teacher says it's your turn to read out loud	90	88	91
15.	About how well you do arithmetic	89	85	89
11.	About how you look and the kind of face you have	88	86	86
17.	About the way your teacher treats you	84	77	89
4.	When you think about going home after school each day	79	79	86
7.	When teacher says she is going to give a test	73	63	72
5.	When teacher tells you to get out your books and begin work	72	62	72
16.	When you think about next year in school	72	66	74
10.	About the way the neighbors treat you	72	67	72
1.	About growing up and getting older	70	81	84
12.	About the way other children treat you	64	55	68
2.	When its time to get up and go to school	63	57	61
	TOTAL PERCENT BY TYPE OF SCHOOL	82	79	84

House-Tree-Person. Scores on the House-Tree-Person instrument were grouped by primary grades 1-3, intermediate grades 4-6, and secondary grades 7-9, thus resulting in a three by three table of type of school (PT, ST, and C) and grade level (primary, intermediate and secondary). The mean scores are shown in Table 11.

Table 11. Mean Scores Obtained from the House-Tree-Person Test Scored to Measure Self-Image by Grade Level and Type of School.

Grades	PT Mean (N)	ST Mean (N)	C Mean (N)	Total Mean (N)
1-3	14.65 (168)	14.91 (281)	14.60 (48)	14.79 (497)
4-6	17.46 (154)	17.73 (256)	17.16 (38)	17.59 (448)
7-9	18.56 (124)	17.97 (207)	19.57 (23)	19.04 (354)
TOTALS	16.71 (446)	16.73 (744)	16.54 (109)	16.91 (1299)

Inspection of these means in Table 11 shows them to be highly similar among PT, ST and C schools within grade levels. There is a very distinct increase in score, however, as children increase in age-grade level. Total means by type of school are very similar.

The analysis of variance was complicated by the fact that there were unequal numbers in the cells in the table. An approximation method is was used as described by Snedecor.[1] The analysis of variance confirmed what is obvious from Table 11, that is, that grade differences were significant, and that type of school differences were non-significant. Not so apparent from Table 11, however, was a significant interaction between grades and type of school. Closer inspection of Table 11 reveals this interaction to result from within the secondary grades 7-9. In the secondary grades, it is seen that control schools were higher than primary target schools, which in turn were higher than secondary target schools. This significant interaction should be viewed as tentative because of the small number of pupils in the sample from the control schools (23).

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[1] Snedecor, George W., Statistical Methods, Iowa State College Press, 1957, page 386.

Since no normative data is available, the only types of comparisons that are possible are internal comparisons. Assuming the instrument is a valid measure of self-concept in terms of the way it was scored and the factors identified, the results seem to contradict earlier studies which indicate that self-image of disadvantaged pupils decreases as they grow older. In this study the over-all scores for self-image were increased from 14.79 in the primary grades to 17.59 in the intermediate grades and 19.04 in the secondary grades. This trend was not noted in the What I Am Like instrument, where means at the elementary level were similar to those at the secondary level rather than lower. It is possible that grade level differences in means for the House-Tree-Person are more a function of artistic ability and maturity than they are of self-concept. This possibility will be studied by further analyses of the eight subtest scores. If maturation or artistic ability do influence these scores, the influence probably would be most noticeable on such factors as detailing in drawings and detailing of face of the first person drawn. This study will be done at a later date.

Summary and Conclusions

Three instruments of a highly experimental nature were developed to measure pupil self-concept. The instruments were: What I Am Like, Attitudes Toward Self and School, and the House-Tree-Person Test. The What I Am Like instrument was given in grades 4-9 while the Attitudes Toward Self and School was given in the primary grades 1-3. The House-Tree-Person test was administered in grades 1-9. In each instance, the instruments were given to random samples of pupils in primary target, secondary target and control schools by school psychologists. The tests were taken late in the school year and are viewed primarily as baseline data for next year's evaluation.

The important findings of this section are:

1. In general, the self-image of pupils in primary target, secondary target and control schools is similar, i.e., PT=ST=C.
2. While these findings must be considered tentative, it does appear that pupil's self-image in both elementary and secondary schools is positive (note the low rating teachers give of pupils when they judge the pupil's self-image as noted in item 27 of the teacher's survey).
3. As measured by the What I Am Like instrument, there was no apparent difference in the way pupils viewed themselves psychologically, socially, or physically. In each instance, the ratings were sufficiently high to infer that the pupil's self-image was a positive one.

PROMOTION RATES

Rationale

Any attempt to appraise the effectiveness of a program through an examination of promotion rates has at least two underlying assumptions: 1. that the standards upon which promotion decisions are based correspond to the objectives of the program; 2. that promotional decisions have some degree of validity, that is, that judgements about a pupil's readiness for promotion reasonably reflect his achievement.

If the standards for promotion vary markedly from the general goals of the program, promotion rates can be considered indicative only of the program's effectiveness in accomplishing those ends which are the bases for promotion. Thus, if the purpose of a school program is to help the child develop in all aspects of his person while promotional decisions are based solely on intellectual criteria, promotion rates are relatively meaningless in trying to determine whether the program is achieving its broader purpose.

One must also be willing to assume that teacher judgements about pupils' readiness for promotion are reasonably accurate. Otherwise, there can be little meaning in the comparison of promotion and failure statistics.

In addition, if one is to compare promotion rates from year to year, school to school, or grade to grade, he must assume reliability or consistency among the judgements of the various persons making decisions about promotion. If teachers in school X are much more liberal in advancing pupils than those in school Y, it is obviously fallacious to conclude from school X's higher promotion rates that the objectives of the educational program are being more successfully achieved.

Method of Analysis

The essential aim of this report is to establish baseline data for comparison with promotion rates after continuance of the Education Act program. Since pupils had been exposed to Education Act services for only about five months in the 1965-66 school year, it is unlikely that any effects that these services might have on promotion would be visible at this time.

Promotion rates were determined by dividing the number of students promoted from each grade by the end-of-year membership for that grade. These ratios were computed for primary target, secondary target and control schools for the years from 1960-61 through 1965-66. Since these data, through at least the first five years, appear homogeneous, composite percentages for the 1960 through 1965 period were computed for each grade in each type of school. Separate percentages were figured for 1965-66 to permit a comparison after the first five months of the Education Act program, even though no signficant changes were anticipated.

Results

The promotion rates for years ending 1961 through 1965 and for 1965-66 are shown in Table 12. The percentages of pupils promoted are lowest at first grade, jump sharply at grade two, increase steadily through sixth grade and decrease markedly in grade seven. There is generally an increase each year from grades seven to nine. The elementary rates are fairly consistent from 1961-65 to 1965-66 with two notable exceptions. These are the percentages from first grade in secondary target and control schools. The sharp increase in both 1965-66 figures is traceable to a few schools in each group having extremely low first grade promotion rates in specific years within the earlier period. Several of these percentages are below 70 and two as low as 61 per cent.

Table 12. Percentages of Pupils Promoted in Primary Target, Secondary Target and Control Schools by Grade, 1961-65 and 1965-66.

Grade	Primary Target 61-65	Primary Target 65-66	Secondary Target 61-65	Secondary Target 65-66	Controls 61-65	Controls 65-66
12	91.8%*	89.0	----	----	----	----
11	91.5	85.8	----	----	----	----
10	87.9	90.4	----	----	----	----
9	88.8	95.7	95.9	88.8	94.5	95.7
8	88.6	92.8	91.3	88.2	91.6	94.8
7	88.9	90.7	91.0	87.5	91.2	95.1
6	98.6	98.5	98.4	98.3	99.8	100.0
5	96.6	97.4	95.0	93.4	98.6	99.6
4	94.3	94.8	95.0	95.4	96.2	99.0
3	94.4	93.8	95.4	96.3	96.1	97.7
2	93.5	94.2	92.9	95.0	95.0	96.3
1	81.7	80.2	78.7	86.6	84.0	89.8
K	99.8	99.9	99.8	99.8	99.9	100.0

*Composite for five-year period.

In all elementary grades (excluding kindergarten) for both sets of data the control school percentages are higher than those of target schools. In grades two, four and six, there is little or no difference between the primary target and secondary target percentages. Secondary target rates are higher than primary target for grade three, but the reverse is true for grade five. In grade one the primary target rate is higher for the earlier period, while the secondary rate is higher for 1965-66.

It is interesting to note that in grades seven, eight and nine primary target rates increased appreciably in 1965-66, control school rates increased slightly, but secondary target rates decreased. Although there is no assurance that this phenomenon has any connection with the Education Act program, it is at least partially consistent with the emphasis on services for youth in the primary target schools.

Summary and Conclusions

On the assumption that promotion rates provide a valid basis for measuring educational effectiveness, percentages of pupils promoted in each grade level were computed for primary target, secondary target and control schools. These data were grouped for the five school years preceding 1965-66 and compared to those of the 1965-66 school year. The following generalizations seem to follow from the data assembled.

1. Promotion rates tend to rise from a low at first grade level through each of the five succeeding elementary school grades. They decrease at seventh grade and generally tend to increase again through the other junior high school years.
2. Where comparisons are possible among PT, ST and C groups (grades K through 9), promotion rates are highest in control schools.

3. Especially in grades seven through nine, primary target school promotion rates increased in 1965-66, while those in secondary target schools showed a marked decline.
4. In view of the variation in the data of 1965-66 compared with those of the earlier period, these promotion rates should probably not be combined to form a single baseline. This is especially true of the secondary level statistics.

PUPIL ATTENDANCE

Rationale

The extent to which pupils attend school is assumed to be a good index of the extent to which they are interested in and motivated for school work. While there is a distinct possibility that a pupil might indicate that he likes school, for example, simply because he is "expected" to like school, it would seem that his daily attendance over a year's period of time would not be subject to the same time sampling problem. Attendance rates are probably unbiased indices of the pupils' attitude toward school.

Obviously, some number of absences are due to illness and other legitimate causes. Since distinguishing between legal and illegal absence is extremely difficult, such an attempt was not made. Instead, total absence figures were collected regardless of cause. It is reasoned that the ESEA program will result in better attitudes toward school and thus be reflected by increased attendance.

Methods of Analysis

Annual average daily absence figures were computed for both elementary and secondary level schools and within these levels, for primary target, secondary target, and control schools. Average daily absence figures were then divided by average daily membership to arrive at the average per cent of daily absence (APDA). These figures were obtained for six consecutive years starting with 1960-61 and ending in 1965-66. Comparisons of per cent of daily absence before and after initiation of the Education Act Program were not made simply because absence from school is largely a function of time of year. In order to factor out this bias the APDA was computed only annually.

From this approach it is seen that the data collected should be viewed as baseline data to determine the normal variation in daily absence during the six years before the Education Act program was initiated. Similar data will be collected for the school year 1966-67, and comparisons will be made with the six years experience data collected.

Results

Average per cents of daily absence by year, level, and type of school are shown in Table 13. These results are shown also graphically in Figures 1 and 2. Inspection of Table 13 reveals three broad generalizations. The first is that APDA at the elementary level is lower than it is at the secondary level. At the elementary level, the APDA for primary target schools is 9.0 for the six year period, 8.7 for secondary target schools, and 8.5 for control schools. At the secondary level, the APDA for the six year period is 13.2 for primary target schools, 10.9 for secondary target schools, and 9.4 for control schools.

The second important generalization is the observation that at both the elementary and secondary level the extent of daily absence is greatest in primary target schools followed by secondary target schools, and least in control schools. In shorthand form with respect to APDA, PT > ST > C. These figures are not surprising, for indeed, the extent of absence may be viewed as one criterion for the identification of primary and secondary target schools. Thus, this is one of the reasons why these schools were selected to receive services under the Education Act.

The third observation from Table 13 shows that the differences in APDA among elementary level schools is much less than it is among secondary level schools. Thus, the largest difference among elementary

Table 13. Average Percent of Daily Absence by Year and Type of School

	YEARS						
	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	Total Average
Elementary Level							
Primary Target Schools	8.8%	8.6%	9.5%	9.7%	8.2%	9.1%	9.0%
Secondary Target Schools	9.0	8.3	9.5	9.6	7.9	8.0	8.7
Control Schools	8.3	8.3	9.0	8.9	8.0	8.4	8.5
Secondary Level							
Primary Target Schools	12.6	13.3	13.1	13.1	13.2	13.8	13.2
Secondary Target Schools	10.6	10.3	10.5	11.4	11.2	11.2	10.9
Control Schools	8.8	9.4	9.8	9.2	9.2	10.2	9.4

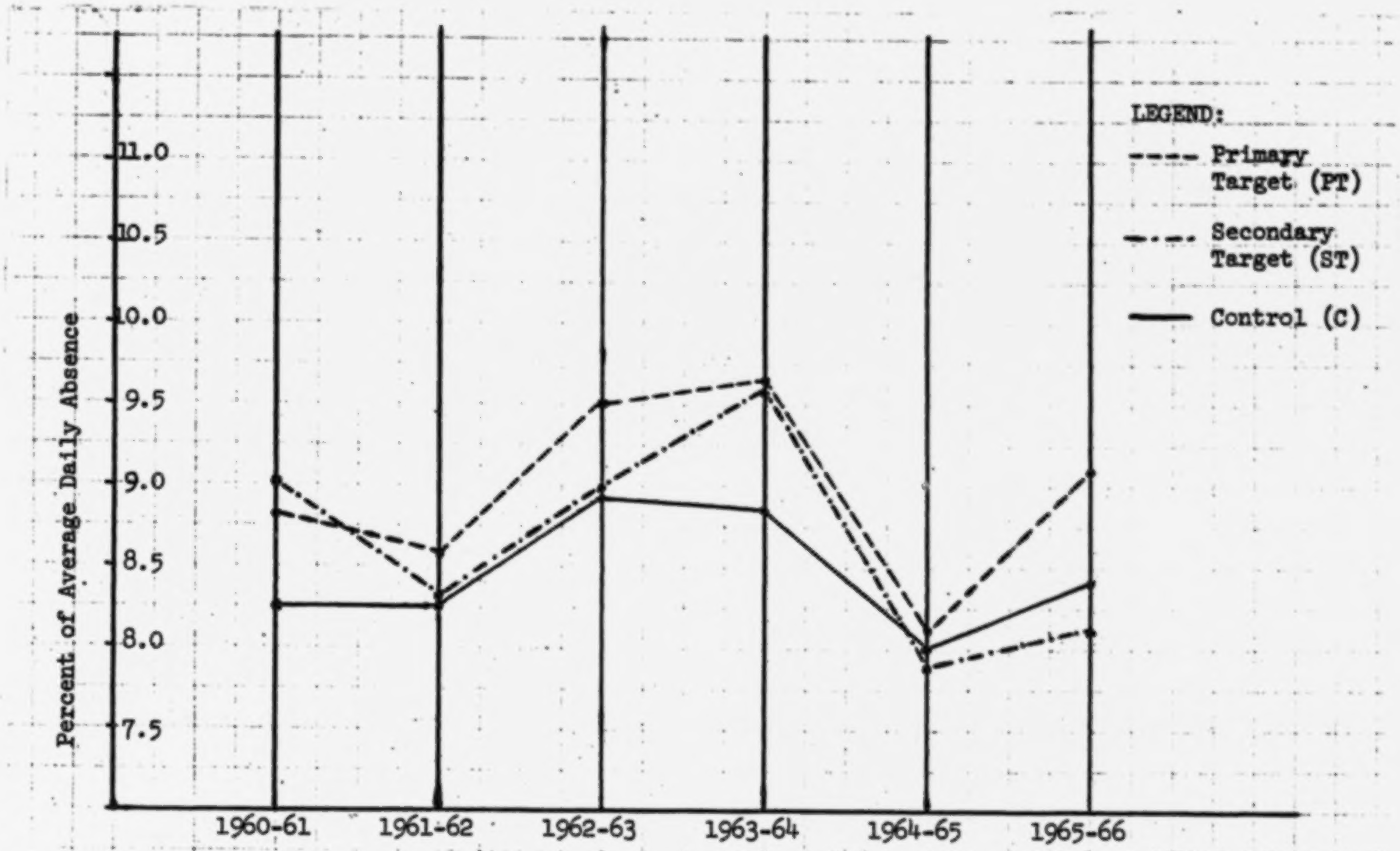


Figure 1. Percents of Average Daily Absence for PT, ST, and C Elementary Schools from 1960-61 to 1965-66.

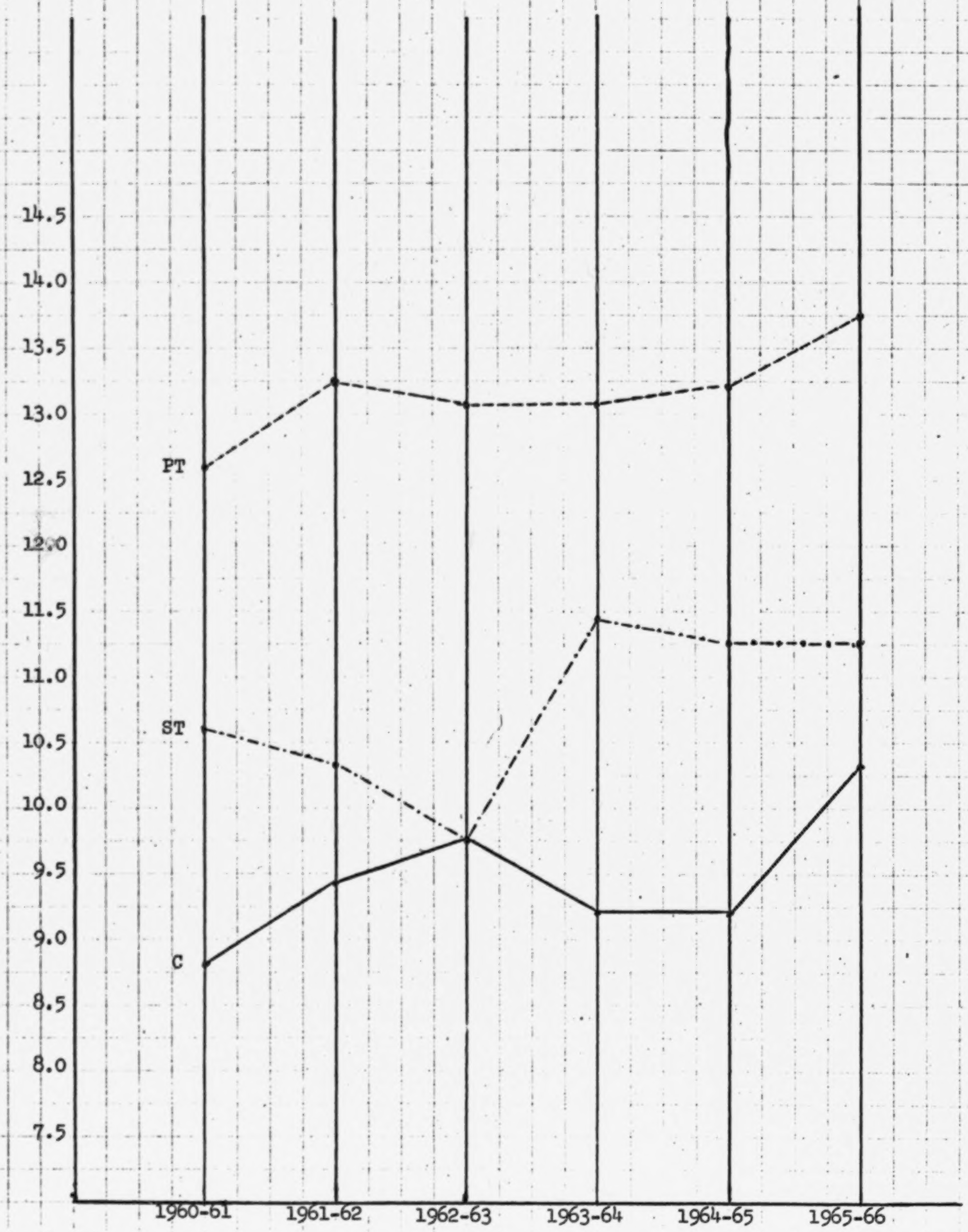


Figure 2. Percents of Average Daily Absence for PT, ST and C Secondary Schools from 1960-61 to 1965-66.

level schools is between primary target schools (9.0%) and control schools (8.5%) or only .5 per cent difference. From the latter observation one may infer that absence from school is a more sensitive indicator of attitude toward school at the secondary level than it is at the elementary level. In all probability, truancy (in contrast to legitimate absence) at the elementary level is less common than at the secondary level possibly because younger children have fewer places to go and things to do than older pupils; the younger child is more "homebound." It also may be reasoned that secondary level pupils are indeed more dissatisfied with school than are elementary pupils.

When similar data are collected for the 1966-67 school year, the difference between those statistics and the total average per cents of primary target, secondary target and control schools by level. The hypothesis is that there will be greatest reduction of absence in primary target schools, followed by secondary target and control schools, as compared with the total average per cents for the six baseline years.

Summary and General Findings

Average per cents of daily absence were determined for primary target, secondary target and control schools at both the elementary and secondary level for the six year period from 1960-61 to 1965-66. The average of these six years is taken as baseline data against which comparisons will be made for the school year 1966-67. The average per cent of daily absence was calculated by dividing the average daily absence by the average daily membership.

The general findings are as follows:

1. At both the elementary and secondary level the highest incidence of average daily absence was in primary target schools followed

by secondary target schools and control schools. At the elementary level for the six year period the average per cent of daily absence was 9.0 in primary target schools, 8.7 in secondary target schools and 8.5 in control schools. At the secondary level similar statistics showed an average per cent of daily absence of 13.2 in primary target schools, 10.9 in secondary target schools and 9.4 in control schools.

2. Absence in all secondary level schools was greater than absence in elementary schools.
3. The differences in average per cent of daily absence within PT, ST and C schools at the elementary level was smaller than the differences among PT, ST and C schools at the secondary level. From this it is inferred that absence is a more sensitive indicator of a pupil's attitude toward school for secondary level pupils than it is for elementary level pupils.

DROP-OUTS

Rationale

Publicity concerning the school drop-out problem has been abundant. Most of what is written about the young person who leaves a school before graduation stresses his lack of employability in a complex age of technology or his proneness to delinquency. Much also has been written concerning ways of combatting the drop-out problem. Fundamentally, the methods suggested emphasize early identification of potential drop-outs and the provision of suitable school programs.

Most of the efforts to provide for early identification indicate that a tendency to drop out of school is prevalent among children in disadvantaged areas. The lack of cultural advantages seems to beget a lack of respect for education. The need for immediate income to provide for urgent necessities also forces many disadvantaged youth out of school. At the center of the causative picture, however, remains the problem of furnishing a meaningful educational program.

If the Education Act program in Cincinnati is successful, one of its effects should be a noticeable decrease in the drop-out rate, especially in target secondary level schools. Primary target schools, receiving the greatest concentration of services, would be expected to show the most improvement.

To expect such a change after only five months of Education Act services, however, is probably unrealistic. Therefore, this report is aimed at establishing baseline data for future comparison.

Method of Analysis

Collecting accurate drop-out data in a large school system is difficult. Standardizing the method of data reporting does not prevent differences in individual judgements on such matters as how situations are classified, how closely pupils should be followed after leaving school, etc. For example, a student whose age is beyond the upper limit of compulsory school attendance might leave a school and move to another city. Such a pupil could be withdrawn as overaged and considered a drop-out, or it could be assumed that he will continue full time education and his change of residence would be the reason for withdrawal.

There is also some amount of ambiguity in the term drop-out itself. The most typical definition of the term includes any pupil who leaves school before graduation or completion of a program of studies without transferring to another full-time school program. Thus, students who continue education in a less structured program than that of the regular day school are generally classed as drop-outs. In addition, it often happens that a pupil leaves school with the idea of terminating his education, but returns later, often to the same program he left.

Of particular difficulty is determining the number of drop-outs in the period from June to September. Students expected at a given school who do not appear when school opens often continue full-time education elsewhere. Although an effort is made to trace each of these pupils who is of compulsory school age, there are no collected data that reflect accurately how many are drop-outs.

For this reason the summer vacation period is not included in this report. Only pupils who drop out in the course of the school year are counted. On the other hand, the withdrawal categories identified as drop-out classifications unavoidably include some pupils who continue their education.

Reports of census changes were used to determine the number of pupils who had left school from September to June in each of three years, under one of the following reasons: government services, illness, pregnancy, work permits, home permits, psychological exlusion, superintendent's expulsion and age beyond compulsory attendance. Also included is an ambiguous miscellaneous category; most often the disposition of these cases was pending at the time of withdrawal. At the secondary level most of these probably discontinued their schooling. At the elementary level it is likely that only a few terminated formal education. Nevertheless, these figures are included in the drop-out ratios for this report since further discrimination is impossible.

A school's drop-out rate is the ratio of the number of drop-outs to the total number of pupils for which the school is accountable (drop-outs plus end-of-year membership). This total accountability figure includes all pupils enrolled in a school in a given year except those who have been withdrawn as deceased or for continuation of education in another school. Graduating seniors are counted in the twelfth-grade end-of-year membership.

For each of three years, drop-out ratios at the secondary level were computed for each grade and for special education pupils in primary target, secondary target and control groups. Because few elementary school pupils withdraw from full-time educational programs, a composite ratio was figured for all elementary grades. This ratio includes special education pupils at the elementary level as well as grades seven and eight in schools where these grades are part of the elementary program.

Since drop-out rates are typically highest in grades 10 and 11 and the secondary target and control groups include no senior high schools, percentages were also computed for grades 8 to 12 and special education in all non-target secondary schools. These were compared with the ratios of the composite target group.

Results

Drop-out ratios by grade for primary target, secondary target and control

Table 14. Percentages of Pupils Dropping Out of Primary Target, Secondary Target and Control Schools (September-June) by Grade and Year.

Grade	Primary Target 63-64	64-65	65-66	Total	Secondary Target 63-64	64-65	65-66	Total	Controls 63-64*	64-65	65-66	Total
12	6.2	9.1	612	7.3	----	----	----	----	----	----	----	----
11	11.0	13.0	13.7	12.5	----	----	----	----	----	----	----	----
10	12.6	16.6	10.7	13.2	----	----	----	----	----	----	----	----
9	9.1	8.9	10.4	9.5	6.8	6.8	7.3	7.0	9.6	6.0	7.1	7.0
8	5.0	5.7	4.9	5.2	3.5	2.9	3.9	3.4	8.9	5.0	3.5	4.9
7	2.0	1.7	2.0	1.9	1.8	1.7	1.2	1.6	2.0	2.0	0.8	1.4
Special Ed. Secondary	11.3	9.3	6.0	7.8	2.5	3.6	0.0	2.1	7.6	1.4	2.9	3.0
All Secondary	7.4	7.5	6.3	7.1	3.8	3.7	3.8	3.8	7.1	4.1	3.6	4.2
All Elementary	0.6	0.7	0.7	0.7	0.4	0.4	0.3	0.4	0.5	0.0	0.4	0.3

*Secondary level control school data for 1963-64 are based on only one school.

schools over a three-year period are reported in Table 14. As expected, the drop-out rate is highest in grades ten and eleven. There is a decrease from grade ten to grade nine, the rate for eighth grade is usually about half of the ninth grade figure, and this ratio is again cut in half for grade seven. Thus, the seventh grade percentages, like those for all elementary grades, are probably too small to be meaningful. The majority of the withdrawals from kindergarten through grade seven are in the ambiguous miscellaneous category.

Where comparison is possible, the drop-out rate is highest among primary target schools, with secondary target and control rates approximately equal (PT>ST=C). A notable exception is seen in the control school ratio for 1963-64. These percentages, however, are deceptive. It is important to note that two junior high schools are included in the 1964-65 and 1965-66 atatistics, while data for 1963-64 are available only for the control school with the higher drop-out rate.

Another basis for comparing drop-out data is illustrated by Table 15. Here the combined ratios of primary and secondary target schools are compared for grades 8-12 and special education with the ratios of all non-target schools. The results confirm the expectation of consistently higher rates in target schools (except for special education), with most target school rates almost twice as high as comparable non-target figures.

Certainly the most interesting finding in Table 15 is the contrast between target and non-target groups in year-to-year patterns. In the one target senior high school the drop-out ratios (grades 10-12) show a marked increase in 1964-65, while the 1965-66 ratios in grades 10 and 12 decrease sharply. In the non-target schools, on the other hand, the rates tend to rise steadily over the three-year period.

The higher rates might be attributed to the expanded education and training opportunities for out-of-school youth, many of which were inaugurated

Table 15. Percentages of Pupils Dropping Out of Target Schools Compared with Non-Target Schools (September-June) By Grade and Year.

	Target Schools				Non-Target Schools			
Grade	63-64	64-65	65-66	Total	63-64	64-65	65-66	Total
12	6.2	9.1	6.2	7.3	3.8	4.6	4.6	4.4
11	11.0	13.0	13.7	12.5	6.7	7.0	7.7	7.0
10	12.6	16.6	10.7	13.2	7.9	8.6	8.9	8.5
9	7.6	7.7	8.5	7.9	3.9	4.0	5.1	4.4
8	4.1	4.1	4.3	4.2	2.4	2.0	2.3	2.2
Sp. Ed.	9.2	7.3	3.9	6.7	9.8	7.7	6.7	7.9
TOTAL	6.9	7.3	6.9	7.0	5.3	5.6	6.0	5.7

in the 1964-65 school year. Despite measures taken to avoid encouraging young people to drop out of school, some of these programs probably attracted a number of students who had been unsuccessful with the regular school curriculum. In the target schools the lower 1965-66 ratios seem more likely a function of increased part-time job opportunities under the Economic Opportunity Act than of the limited services provided under the first few months of the Education Act program.

In any event, there does not appear to be sufficient homogeneity among the data to justify grouping the figures for the three years. Rather, future comparisons should consider differences that are observable from year to year as well as those among grades and types of school. Composite non-target school rates should be included, especially as senior high school controls.

Summary and Conclusions

To establish baseline data for future evaluation of the Education Act program, drop-out rates were computed for each grade in secondary level target and control schools together with composite rates for secondary special education pupils and for elementary schools. Drop-out rates in non-target schools were also compared by grade and year with target school rates. From an examination of these data the following conclusions might be reached.

1. Drop-out rates tend to be highest in the most disadvantaged areas, i.e., the areas of primary target schools. Although no consistent difference is noticeable between the rates of secondary target and control schools, composite target school percentages are consistently higher than those of non-target schools.

2. As one might expect, the rates for grades ten and eleven are highest. Since no senior high schools are included in the secondary target and control

groups, comparisons among PT, ST and C groups cannot be made for these grades. However, a comparison of target and non-target groups shows that senior high school rates tend to rise steadily over the three-year period in non-target schools, while in the target schools they increased for 1964-65 and decreased for 1965-66.

3. Because of these fluctuations the data should be kept separate for the three years rather than combined to form a single baseline.

CONCLUDING STATEMENTS

Perspective

Further synthesis of the report contained in this issue of the Journal would be unrewarding. In the first place, the reader who is seeking a rapid overview of the evaluation needs only to read the "Summary and Conclusions" of each section. Secondly, to attempt a final summary would be to further risk the dangers of over-simplification.

Unfortunately, such reports as this often lead observers to make hasty judgements about the effectiveness of the total school system or of its specific components. In reality, the educational characteristics appraised here, complex as they are, represent only a few of the dimensions that make up the operation of the schools and a few of the significant goals of the schools in working with pupils. Each element in this complicated educational system--whether teacher morale, pupil achievement, or parents' attitude toward school--is intimately associated and interacts with every other element. Further, all these elements are relative to time, which often has a profound effect on their interaction.

Some readers may be disappointed with the evaluation because it does little to identify significant change attributable to the Education Act. The report, of necessity, has been oriented primarily toward establishing baseline data on several important dimensions of the educational health of the target schools. Baseline data, however, are extremely important. By its very nature, a baseline is a point of departure; it represents the knowledge of where one is. This, in turn, implies that where one goes can be thought of with reference to where one started. Through such comparison it is possible to recognize gains that may have occurred so imperceptibly as to give the impression that no progress has been made.

Challenge

In another sense a baseline represents a challenge. It is hoped that all staff members--teachers, principals, supervisors, and other administrative and supportive personnel--will view all these data as records to be broken. If target school pupils deviate markedly from achievement norms by the time they reach the end of grade three, we must work assiduously to discover the reason for this level of achievement. If school attendance is low or drop-out rates high, we must look further for causes and correctives.

To suggest that each statistic in this report should be a challenge does not imply that members of the professional staff are not doing an effective job. Nor does it mean that the goal is to make a genius of each pupil. The suggestion is rather that the dedication and professional competence that characterize the staff members of our schools must be put to the best possible use in the service of youth. No matter how good a situation may be, it can always get better, and it is in this spirit that this challenge is presented.

Future Evaluation

Perhaps the most important function of this report is to serve as a prototype for a school-wide or system-wide diagnostic effort. Such diagnosis is of critical importance. Understanding our strengths and weaknesses is an essential first step to improvement. Each chapter of this report might be compared with a test drilling in which core samples are assayed to determine certain qualities. The samples used here, though only a few of the possible bases for analysis, might be useful as a guide in future research efforts.

However, to understand fully the characteristics evaluated here requires more than a mere knowledge of them in isolation. It requires an understanding of how these various qualities relate to and are affected by other qualities.

More specifically, one might consider the quality of staff morale as measured by the teacher survey. How does staff morale relate to pupil achievement within a school? If the relation is a positive one--and this seems to be a plausible hypothesis--to what extent should a school system focus on attaining higher staff morale, and how is this done?

Or take the matter of pupil self-concept. If our suspicions are confirmed that a pupil's image of himself is considerably better than his teacher thinks it is, what is the implication of this observation? How does this discrepancy affect the teacher-learner relationship?

Hundreds of relational type questions can be posed on the basis of dimensions measured in this report. Each involves much thought and guided research. It is hoped that staff members reading this report will indeed give considerable thought to the kinds of questions that arise from these results, for the stimulation of research is one of the important products of the research effort itself. It is axiomatic that the more we know, the more we find that we need to know.

APPENDIX

SURVEY OF TEACHER OPINIONS

1. Name of school.

____

2. In what level do you work?
Pre. ☐ Pri. ☐ Int. ☐ Jr. ☐ Sr. ☐

3. Other levels at which you have taught.
Pre. ☐ Pri. ☐ Int. ☐ Jr. ☐ Sr. ☐

4. Sex.
M ☐ F ☐

5. Years of teaching experience.
1-3 yrs. ☐ 4-10 yrs. ☐ over 10 yrs. ☐

6. Years experience teaching similar pupil .
1-3 yrs. ☐ 4-10 yrs. ☐ over 10 yrs. ☐

(Poor) (Neutral) (Good)

7. Adequacy of supplies.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

8. Motivation of my pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

9. Size of my class(es).
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

10. Books available to my class.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

11. Provision for academic remediation.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

12. Degree of tardiness.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

13. Time and place for pupils to study.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

14. Pupil aspiration level.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

15. Parent participation in school.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

16. Teaching in my school.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

17. Supportive attitude of parents.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

18. Pupil discipline.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

19. Provision to challenge able learner.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

20. Provision for visiting teacher services.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

21. Provision for supervisory personnel.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

22. Adequacy of enrichment activities.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

23. The type of pupils I teach.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

24. Staff morale.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

25. Time to teach.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

26. In-service training.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

27. Pupil image of self.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

28. Field trip opportunities.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

(Poor) (Neutral) (Good)

29. Parent involvement.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

30. Adequacy of school building.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

31. Pupil-faculty relations.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

32. Adequacy of school library.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

33. Availability of professional reading matter.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

34. School's provision for pupil's health.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

35. Overall health level of pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

36. School attendance of pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

37. Teacher time to plan.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

38. Teacher-Administration cooperation.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

39. Behavior standards of my pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

40. Adequacy of school playground.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

41. Provision for pupil's cultural growth.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

42. Achievement of pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

43. Pupil acquaintance with total community.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

44. Present curriculum for the disadvantaged.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

45. Provision for physically-handicapped child.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

46. Provision for emotionally-disturbed child.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

47. Provision for socially-maladjusted child.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

48. Previous academic preparation of my pupils.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

49. Professional cooperation among school staff.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

50. School's attempt to reach parents.
a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐

STUDENT SURVEY
Cincinnati Public Schools

School ______________________ Date ______________________

Grade:	4	5	6	7	8	9	10	11	12		Boy	Girl
	☐	☐	☐	☐	☐	☐	☐	☐	☐		☐	☐

Yes No

☐ ☐ 1. Do you like school?

☐ ☐ 2. Do you need more help from your teacher?

☐ ☐ 3. Would you like to talk to your teacher more?

☐ ☐ 4. Do you read books from a library?

☐ ☐ 5. Do you enjoy field trips?

☐ ☐ 6. Do field trips help you in schoolwork?

☐ ☐ 7. Do you have a hobby?

☐ ☐ 8. Would you like to spend more time at school?

☐ ☐ 9. Are you satisfied with the grades on your report card?

☐ ☐ 10. Do you worry about your schoolwork?

☐ ☐ 11. Are you doing better in your schoolwork this year?

☐ ☐ 12. Do you like your school?

☐ ☐ 13. Do you look forward to coming to school each morning?

☐ ☐ 14. Do you talk about school at home?

☐ ☐ 15. Has someone from home ever talked to your teachers?

☐ ☐ 16. Do you get praise at home for good schoolwork?

☐ ☐ 17. Do you think you will graduate from high school?

☐ ☐ 18. Do you hope to go to college?

☐ ☐ 19. Do you talk at home about what kind of job or career you will have after you are out of school?

☐ ☐ 20. Do you read more than is required by your schoolwork?

PARENT QUESTIONNAIRE
Cincinnati Public Schools

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

School ____________________ Date of Interview ________________

Pupil's Name ____________________

Parent or Guardian ____________________ Sex: M ☐ F ☐

Grade:	Pre	Kdg	1	2	3	4	5	6	7	8	9	10	11	12
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

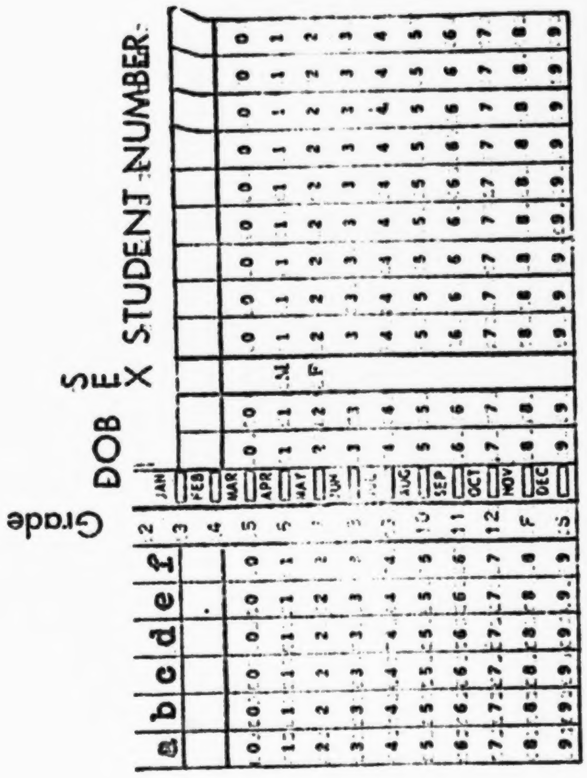
Study Group: Yes ☐ No ☐

	Very Much	Some	Not At All	DK
1. Is ______________ improving in (his or her) schoolwork?	☐	☐	☐	☐
2. Does ______________ study at home?	☐	☐	☐	☐
3. Does ______________ like school?	☐	☐	☐	☐
4. How interested do you think the teacher and principal are	☐	☐	☐	☐
in ______________?	☐	☐	☐	☐
5. Does the school help ______________ stay out of trouble in the	☐	☐	☐	☐
neighborhood?	☐	☐	☐	☐
6. Does ______________ read at home?	☐	☐	☐	☐
7. Has ______________ become more helpful around the house because	☐	☐	☐	☐
of what (he or she) is learning in school?	☐	☐	☐	☐
8. Does the school help ______________ behave better at home?	☐	☐	☐	☐
9. Does the school help you to do more things with ______________?	☐	☐	☐	☐
0. Has the school helped you to do more things with ______________?	☐	☐	☐	☐
1. Has the school helped ______________ in the use of (his or her)	☐	☐	☐	☐
out-of-school time?	☐	☐	☐	☐
2. Have you been encouraged to participate in school activities?	☐	☐	☐	☐
3. Are you in any way active in the school?	☐	☐	☐	☐
4. Do you like ______________ school?	☐	☐	☐	☐
5. Would you like to know more about ______________ school?	☐	☐	☐	☐

PD-5/66-5-ESEA

Name ____________________ School ____________________

Grade __________ Sex __________ Date ____________________


STUDENT NUMBER
SEX
DOB
Grade
M
F
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
a
b
c
d
e
f

A. WHAT I LOOK LIKE

		1	2	3	4	5	
1.	Short	☐	☐	☐	☐	☐	Tall
2.	Quick	☐	☐	☐	☐	☐	Slow
3.	Big	☐	☐	☐	☐	☐	Small
4.	Weak	☐	☐	☐	☐	☐	Strong
5.	Clean	☐	☐	☐	☐	☐	Dirty

		1	2	3	4	5	
6.	Busy	☐	☐	☐	☐	☐	Lazy
7.	Good Looking	☐	☐	☐	☐	☐	Ugly
8.	Fat	☐	☐	☐	☐	☐	Thin
9.	Healthy	☐	☐	☐	☐	☐	Sick
10.	Awake	☐	☐	☐	☐	☐	Sleepy

B. WHAT I AM

		1	2	3	4	5	
1.	Happy	☐	☐	☐	☐	☐	Sad
2.	Somebody	☐	☐	☐	☐	☐	Nobody
3.	Empty	☐	☐	☐	☐	☐	Full
4.	Bad	☐	☐	☐	☐	☐	Good
5.	Angry	☐	☐	☐	☐	☐	Kind

		1	2	3	4	5	
6.	Question	☐	☐	☐	☐	☐	Believe
7.	Bold	☐	☐	☐	☐	☐	Shy
8.	Winner	☐	☐	☐	☐	☐	Loser
9.	Unimportant	☐	☐	☐	☐	☐	Important
10.	Smart	☐	☐	☐	☐	☐	Dumb

C. WHAT I AM LIKE WHEN I AM WITH MY FRIENDS

		1	2	3	4	5	
1.	Give	☐	☐	☐	☐	☐	Receive
2.	Sad	☐	☐	☐	☐	☐	Happy
3.	Together	☐	☐	☐	☐	☐	Alone
4.	Hurt	☐	☐	☐	☐	☐	Help
5.	Listen	☐	☐	☐	☐	☐	Tell

		1	2	3	4	5	
6.	Agree	☐	☐	☐	☐	☐	Fight
7.	Big	☐	☐	☐	☐	☐	Little
8.	Friend	☐	☐	☐	☐	☐	Enemy
9.	Follower	☐	☐	☐	☐	☐	Leader
10.	Last	☐	☐	☐	☐	☐	First